24-month Chronic and Carcinogenic Inhalation Toxicological Study of Methanol in Fischer Rats

(Vol. 6)

Individual Food Consumption Rate
Individual Laboratory Test Results
Individual Organ Weight
Individual Organ Weight to Body Weight Ratio

September 30, 1985

Mitsubishi Chemical Safety Institute, Ltd.

Table of Contents

	1.	Individual	Food	Consumption	Data
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	Male	1 – 16
	Female	17 – 32
2.	Individual Urinalysis Data	33 – 48
3.	Individual Hematological Data	49 - 72
4.	Individual Hemogram 1 (Differential Leucocytes Count)	73 – 97
5.	Individual Hemogram 2 (Leucocytes Count)	98 – 122
6.	Individual Biochemical Data	123 – 170
7.	Individual Organ Weight Data	171 – 218
8.	Individual Organ Weight to Body Weight Ratio Data	219 – 266

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17.57 12 1.196

17.34 12 0.814

17.33 12

17.86 12 0.602

18.13 12 0.657

18.18 12 1.368

16.99 12 1.025

15.64 12 0.729

Mean N S.D.

APPENDIX 4-M1-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex:

0 ppm Male

Experimental No. 82014

17.0 115.7 115.3 119.4 117.0 119.6 116.6 56 17.8 116.9 116.2 116.8 117.3 117.2 118.5 118.5 49 Food Consumption (g/Animal/Day) 17.4 116.2 116.2 117.0 116.9 117.5 117.4 117.9 17.6 18.5 18.1 17.2 17.3 17.8 17.8 17.8 35 (Day) 28 17.3 18.6 118.0 117.0 118.1 118.1 119.2 117.0 118.7 1168.6 119.1 119.0 118.2 118.2 106.1 106.1 17.0 15.6 16.3 18.7 16.0 16.0 17.1 14 11445.0 1165.2 165.2 165.2 165.3 165 14.8 7 Number Cage

APPENDIX 4-M1-2

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4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex: 0 ppm

Male

	,] 			
	182	19.0	17.4	2	9	9	9	_	യ	17.5	9	9	16.7	17.61	12	1.273
(Д	154	1 9	16.6	5	7	60	О	5	7	7	ك	9	ъ В	17.25	12	1.324
(g/Animal/Day	119	1 .	16.8	5	7.	7.	9	9	9	16.5	9	S.	9	16.43	12	999.0
Consumption (g,	91	16.9	17.8	5.	7	ъ 8	9	7	7	17.5	7	7	•	17.36	12	0.678
Food Consi	(Day) 84	17.7	17.7		•	7.	•	7	Ġ	17.1	•	17.1	18.4	17.41	12	0.487
	77	1 6		6	7	0	_	φ α	7	7	ω	9	17.1	7		0.829
	70	1 6	18.3	ıΩ.	_	ω.	6	ω	6		ω.	9	9			1.269
	63	1.		0	9	 	7	7	ω.	9	, œ	,	17.5			0.885
	Cage Number		1 ~	ı (*) 4	· ທ	ı ve		- α	σ	, ,) 	12	Mean	Z	S.D.

APPENDIX 4-M1-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS.

Level and Sex :

0 ppm Male

							EX	Experimental No. 82014
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		E	Food Consu	onsumption ((g/Animal/Day	λ)	
Cage				(Dav)				
Number	210	245	273	301	365	392	483	518
		i •	7.	16.5	9	7.	δ.	9
5	17.4	9	7	16.2	5.	7	δ.	9
ı ~	16.7	16.5	16.1	15.6	15.3	15.8	15.1	15.0
0 4		9	9	16.6	5.	9	ж •	4.
ינר			ω	16.9	9	7	9	9
ى د	16.7	Ω.	7	15.8	5	9	4.	ъ.
, _		9	7	16.3	ъ.	9	5	4.
. cc	17.1	9	7	16.1	4.	9	ъ.	9
, o	٤	15.7	•	15.1	4.	7.	5.	2
10	17.3	7	7.	17.0	7.	7.	7	7.
	•	•	7	16.4	9	9	ė.	2
12	•	•	•	17.9	7	-;	8	7.
Mean	17.27	16.67	17.28	16.37	15.67			
Z	12	12	12	12	12	12	12	12
S.D.	0.533	0.735	0.563	0.722	0.997			

APPENDIX 4-M1-4

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex :

0 ppm Male

Experimental No. 82014																0.1		## H
	1Y)		728	15.9	٠. ك	9		വ	15.3	15.4	4.	7		16.6	18.0	16.0	Ξ,	
	(g/Animal/Day		700	19.5	16.4	9	•	7	5	13.5	9	7		18.2	18.9		H	1.639
	Consumption (665	7	0	7.		7		15.0	у.	7	8.5	•	15.5	•	12	
	Food Consu		(Day) 637		16.4	16.4	17.7	17.4	17.1	9	16.4	17.6	20.7	18.1	18.8	•		1.263
			609	4.	4.	9	4.	9	4.	16.6	9	9	M	•	20.3			
			574	17.0	9	2	2	9	5	16.2	9	Ω.	8.2	7.	•		12	
			546	17.1	7	٠. س	9	9	2	16.1	9	9	7.	ω,	8			0.908
		Cage	Number		^	ım	4	ı M	9	7	- α	<u></u> თ	10	11	12	Mean	Z	S.D.

X ; No animal existed, M : Not measured because of operational mistake

APPENDIX 4-M2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm Male

	 					 	! ! ! ! ! !
	56	18.6 18.5 17.6	7.0			· • i	18.44 12 0.961
()	49	18.6 18.3			œ 0	ထင္က ၂	18.61 12 0.774
(g/Animal/Day	42	18.8 18.3 17.6	7.	7 8 7.	. o	90	18.04 12 0.974
Consumption (g/	35	19.1 18.2 18.5			o. l.	<u>ი</u> ი	18.97 12 1.264
Food Consu	(Day)	ω ω α	17.5		0 6	00	19.15 12 1.093
	21	1 . 8 8	16.4	တ္ထင္တ	900	00	18.27 12 1.092
	14	1 92 4	15.5	9		7.	17.23 12 0.910
	7	, v, v,	14.4	ນິດທີ		90	15.82 12 0.671
	Cage	1000	104 105	000	0	H	Mean N S.D.

APPENDIX 4-M2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

10 ppm Male

No. 82014					·													
Experimental N			182	17.7	6	7	7	7	21.1	ω.	ъ Ф	19.7	19.3	21.1	21.3	19.19	7	1.493
EXE	(/		154	17.4	•	7	7.	7.	9.	8	7	18.4	œ.	· ω	9.	18.22	12	
	(g/Animal/Day		119	9	17.0	9	9	9	17.4	16.7	9	15.6	7.	•	7.	16.65	12	0.663
	Consumption (g/		91	19.0	•	9	œ	17.5	•	17.9	18.4	18.3	m	20.0	$^{\circ}$	18.33	12	0.828
	Food Consi	(Day)	84	18.5	19.3	17.4	•	17.9	18.9	18.3	19.3	18.6	18.4	19.5	19.5		12	0.690
			77	17.5	17.8	17.1	16.7	17.4	18.2	18.0	17.7	17.6	17.6	18.5	18.5		12	0.534
	~		7.0	17.7								18.2		18.0	19.3	18.17	1.2	0.750
			63	17.8													12	
		Cage	Number	101	102	103	104	105	106	107	108	109	110	111	112	Mean	Z	S.D.

APPENDIX 4-M2-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex :

10 ppm Male

No. 82014																
Experimental No.		518	- 9	17.5	۲.	ف ر		• •	n r	٠,		٠.	18.1	1 .	13	1.270
臣〉	y)	483	7	18.0	٠,		o =	+ -	•		•	•	• •	17.03	12	1.180
	(g/Animal/Day	392	7.	17.3	• -	·		: _	• - \	•	•	• ~	18.9	17.51	12	0.630
1 1 1 1 1 1	Consumption (g	365	4	15.5	· <	יי יו		מו	. ~	•	٠ ،			15.38	12	0.937
1	Food Cons	(Day) 301	17.9	·) r	16.2	17.8	ີ ຕ	٠ د		· ~	_	18.9		12	0.959
		273	18.0	٠ ر		· ·	œ.	/		٠.		~·	_:	17.37	12	1.381
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		245	16.9		9	ر. د	ъ.	ė	· 0	7	٠.		<u>.</u> ش	16.75	12	0.780
		210	16.9		9	5.	7	7.		7	œ.	7	. i	17.08	-	0.854
	Cage	Number	101	\circ	0	0	\circ	0	\circ	\circ	~	т ,	- :	Mean	Z	S.D.

APPENDIX 4-M2-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

10 ppm Male

Experimental No. 82014 17.63 12 1.383 18.8 116.2 118.6 118.1 117.4 117.3 117.3 117.1 118.5 728 Food Consumption (g/Animal/Day) 17.07 12 1.289 18.2 116.9 117.2 117.1 117.8 117.8 117.8 117.8 118.7 16.76 12 2.664 17.7 116.9 116.9 19.2 118.1 118.1 118.1 118.1 118.3 665 (Day) 17.63 12 1.076 17.9 116.3 116.3 116.3 118.5 117.9 117.9 117.3 637 18.0 118.0 117.8 117.8 119.5 119.2 119.2 609 17.9 17.6 17.5 17.5 117.9 118.3 118.4 115.0 115.0 574 17.32 12 1.115 18.4 114.8 117.0 117.0 116.0 117.8 118.3 118.3 546 Number Cage Mean N 101 103 103 103 103 103 110 1111

APPENDIX 4-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Male

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			1 1 1 1 1 1										•		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
		56	8	7	ω,	19.1	8	8	8	ω	7	7.	&	8	18.22		0.542
(/		49	7.		7.	18.2	9	7.	9	7.	7.	9	7	&	18.07		0.664
(g/Animal/Day)		42	7.	7	ω,	19.1	9.	7.	9	ω	7.	7.	7	&	18.26		
ion		35	7.	6	9	20.8	9.	ω	ω,	&	7	7.	8	8	18.72	12	
Food Consumpt	(Day)	28	8.	ω.	9	19.9	φ,	7	œ	ω	9	7	7	7.	18.10		0.849
		21	7.	ω	ω	19.2	α	7	7	7	7	9	7	7.	17.79		0.679
		14	7.	7.	7.	19.0	ω	7.	. . _	9	9	7	9		17.40		0.685
	•	7	4.	ഹ	9	16.9	9	5.	9	9	9	2	5.	5	15.88		0.559
ָ מ כ	רמע מ	Number	0	\circ	0	204	0	0	0	0	0	\mathbf{H}	\mathbf{H}	-	Mean	Z	S.D.

APPENDIX 4-M3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

100 ppm Male

No. 82014																		
Experimental No			182	16.9	19,3	19.1	20.3	20.2	18.6	•	19.5	•	18.7	19.1	19.8	19.15	12	
dxa			154	18.3	18.7	17.7	20.0	18.8	18.0	17.5	17.7	18.4	17.3	18.4	19.3	18.34	12	0.783
	(g/Animal/Day		119	15.0	18.0	17.2	9	17.1	16.6	17.8	15.7	17.0	15.8	16.8	16.9	16.97	12	1.218
			91	8 1	ω	19.1	ω,	ω	18.0	9	18.8	19.2	17.4	18.8	13.3	17.93	12	1.616
	Food Consumption	(Dav)	84	17.5	17.1	18.2	18.7	18.6	17.4	18.2	17.9	18.0	17.7	18.2	18.7	18.02	12	0.520
			77	7.	7.	ω,	ъ Ф	8	17.3	ъ 8		8	9	ω	7	17.83	12	0.693
			70	7.		7	9	ω	17.2	φ ω	о С	7	7	7	• m		12	0.633
1 1 1 1 1			63	1 &	ω	ω	9	ω	17.7	ω	7.	7.	9	ъ 8	7.	18.04	12	0.653
1 1 1 1 1 1 1 1	ָ ני ני	ر ه با	Number	1 (7	202	203	204	205	206	207	208	209	210	211	212	Mean	Z	s.D.

APPENDIX 4-M3-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

100 ppm Male

Experimental No. 82014 16.81 12 0.765 17.6 116.2 116.2 116.0 116.0 116.2 116.2 117.6 118.4 16.83 12 0.882 17.0 117.3 116.3 116.3 116.6 117.2 115.2 115.2 117.1 117.1 117.1 483 Food Consumption (g/Animal/Day) 16.68 12 0.741 17.1 117.5 116.7 116.7 116.8 116.7 116.4 115.6 115.8 115.8 392 15.63 12 0.751 365 (Day) 12 16.87 16.6 118.1 116.4 117.6 117.0 116.8 116.5 117.0 117.0 17.29 12 0.746 17.6 17.9 17.5 116.3 116.3 116.5 116.5 116.8 16.57 12 1.011 117.6 117.6 117.7 117.7 117.9 117.9 117.0 245 17.71 12 0.97018.3 119.1 117.1 117.2 117.0 117.0 117.0 116.6 210 Number Cage 201 202 203 203 204 206 207 209 210 212 Mean S.D. z

APPENDIX 4-M3-4

25

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex : 100 ppm Male

()		728	17.4	15.7	15.4	17.1	15.1	16.4	17.3	16.7	ω	16.5	9	œ i	16.74	12	1.030
(g/Animal/Day		700	9	9	5.	9	9	7.	18.4	7.	7.	9	5	8	16.98	12	0.854
Consumption (g,		665	8		5.	15.2	5.	7.	· ω	5.	ω,	15.6	4.		16.76	12	1.503
Food Consu	(Netl)	637	18.4	17.5	13.4	20.9	16.1		17.9		•	ω	16.4			12	1.814
		609	6.	9	9	9	Ŋ.	ω,		ω,	œ	9	9	8		\sim	1.268
		574	7	'n	·	7.		7	œ	ω.	~	_	ġ	19.3		2	0.813
		546	7	7	₹'	ė	9	-	ω.	i	4.	7	ထ	18.8		12	2.021
	Cage	Number	i O	0	0	0	0	0	207	0	0	-	\vdash		Mean	Z	S.D.

APPENDIX 4-M4-1

35

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex : 1000 ppm Male

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		56	•	•	•	3.1	•	•	•	•	•	•	•	•	.70	12	834
		49	.0	.3	.6	9.4 18	6.	.7	.4	.9	.6	.8	.0	8.		12	772 0.
(g/Animal/Day)		42	6.3	7.9 I	6.8	8.7	7.6	7.0 I	7.5	6.0	7.7	6.9	8.1	7.3 1		12	
1		35	.8	.7	.7	17.2	.4	.2	.8	.8	.6	.3	.6	8.	16 1	12	0.791 0
ood Consumption	(Day)	28	6.2	7.4	8.6	17.7	8.0	8.3	6.2	. 8.9	8.5	7.2	7.4	8.1	1	12	0.824 (
丘 		21	5		7.	18.6	7	7	9	S.	7	7	9	7.		12	0.831
		14	5	7	5.	18.5	ω,	9	5	ъ.	ъ,	9	δ.	9	16.39	12	1.036
		7	5	9	ы.	15.8	9	4.	4	4.	4.	5	5	9	15.33	12	0.611
	Cage	Number	10	0	0	304	0	0	0	0	0	_	\neg	\vdash	Mean		S.D.

APPENDIX 4-M4-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Male

		1												1		
		1												1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	182	17.1	9	9	&	&	7.	ω,	ω,		8	19.0	18.8		5	
γ)	154	16.7	7.	7	ω	7	•	7	7	16.3	7.	16.8	17.2	17.18	12	0.461
(g/Animal/Day	119	16.0	•	9	ω	9	17.2	7	5	5.	17.4	16.2	•	16.79	12	0.867
Consumption (g	91	17.8	•		•	•	•	•	•	•	•	17.8	•	17.75	12	0.629
Food Cons	(Day) 84	16.6	7.	9	•		18.2	9	•	•	18.1	18.1	18.8		12	0.934
	77	6.	9	5		7.	7.		9	7.	9		ω	17.10		0.705
	70	7.	7	9	ω	7	9	7	9	7.	7		_	•		0.560
	63	•	7.	9	ω	7	7.	ė	7.	7.	7.	9	ထ		12	0.812
Cage	Number	301	0	0	0	0	0	0	0	0	\vdash	-	312	Mean	Z	S.D.

APPENDIX 4-M4-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm

Male

				Food Cons	onsumption (g	(g/Animal/Day	γ)		! ! ! !
Cage									
Number	210	245	273	(Day) 301	365	392	483	518	
		Ĺ			1	 1 1 1 1 1 1	: : : : : : : : :		
0	5.	5.	7	9	14.8	16.8	16.0	12.7	
0	5	9	9	4.	4.		ك	2	
0	9	9	7	5	14.2	•	2	12.3	
0	9	4.	7	9	4	Ġ		, ~	
0	5	5.	. 9	9	5	9	15.6		
0	9	5.	5.	5		9	5	12.4	
0	9	5	9	5	4.	9	'n	2	
0	5	5	5	ъ.		2	4.	12.1	
309	14.7	14.8		4	14.5	15.9	14.0		
$\overline{}$	9	5	5	5		9	2	13.5	
	9	9	9	4.	15.8		14.3		
— ;	8	9	18.2	15.5		7		12.9	
Mean		15.82	_				15.41	12.63	
Z	12	12	12	12	12	12	12	12	
s.D.					0.701	0.626		0.485	

APPENDIX 4-M4-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Male

Experimental No. 82014

			728	5.	4	9		5.	15.9		15.8		17.3			15.80	88	0.741
od Consumption (q/Animal/Day)			700	16.2	5	9	15.5	15.5	5.	x 0.6	S	ж Ж	16.3	-		14.50	11	2.380
umption (g/	1		9	16.7	14.7	16.5	15.0	10	• •	Ϊ.	у.	٠ ش	17.8	9		15.28	11	1.731
Food Cons		(Day)	\sim	16.8	16.1	16.6	15.3	15.3	15.0	15.8	9	16.9	ω	18.4		16.45	11	1.104
			609	1 6	ω	ъ 8	17.9	7.	-	7.	9	2	0	9			H	2.683
			574	7.	9	7.	18.3	4	7.	7.	ъ.	ω,	0	•	×		11	3.287
			9	7.	9	9	16.8	9	9	ω,	9	4.	7.	7.	δ.		12	1.025
	Cage		Number	301	0	0	0	0	0	0	0	\circ				Mean	Z	S.D.

X :No animal existed

APPENDIX 4-F1-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex : 0 ppm Female

	56	2	ж •	7	Η.		5	2	3	3	3	7	. I			0.691
	49	2.	3	÷	÷	÷	÷	-	د	ς.	2		N			
	42	, E	2	÷	i	⊢	-	÷	ж •	3	2	2				
	35	3.	Э.	÷	-	-	2	2	2	5	2	2				
(Day)	28	2	ς,	2,	-	2	5	2	7	ς.	3,	2.	2			
	21		•	•	•	•	۰		•	•	•	•	•	10	\sim	0.442
	14	į .	•	•	•	•	•	۰			•	•	•	2.1	12	0.650
	7			•	•			•	•		•	•	•	2.4	12	7
Cage	Number	10	0	0	0	0	0	0	0	0	0	0	0	Mean	Z	S.D.
		(Day) 7 14 21 28 35 42 49	(Day) 7 14 21 28 35 42 49 56 	7 14 21 28 35 42 49 56	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.5 13.6 12.9 12.1 13.8 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.6 12.9 12.1 13.8 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.6 12.9 12.1 12.6 12.9 12.1 12.6 12.9 13.5 13.6 12.9 12.1 12.5 11.6 11.9 11.7 12.2 12.0 11.5 11.7 11.3 11.6 11.5 11.5 11.5 11.5 11.5 11.5 11.5	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.5 13.6 12.9 12.1 12.6 12.1 11.7 12.9 11.6 11.9 11.7 12.1 12.2 12.0 11.5 11.7 11.3 11.6 11.5 11.5 11.7 12.3 11.3 11.5 11.6 11.9 12.	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.5 13.6 12.9 12.1 12.6 12.9 12.1 12.5 13.0 12.8 13.5 13.5 13.5 12.0 11.7 12.9 11.7 11.3 11.6 11.5 11.7 12.2 12.2 12.3 11.7 12.3 11.5 11.5 11.6 11.5 11.5 11.5 11.5 11.5	(Day) 13.8	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.5 13.6 12.9 12. 13.8 12.8 12.1 12.5 13.0 12.8 13.5 13.5 12.6 12.9 12.1 12.2 12.1 11.7 12.9 11.7 11.9 11.7 12.1 11.7 12.3 11.3 11.5 11.6 11.5 11.5 11.5 11.5 11.6 12.1 11.6 12.1 12.2 11.7 11.9 12.1 12.1 12.2 11.6 12.1 12.1 12.2 11.6 12.1 12.1	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.6 12.9 12.9 12.1 12.5 13.6 12.9 12.1 12.2 12.0 11.5 11.7 11.3 11.6 11.9 11.7 12.1 11.7 12.2 12.5 12.3 11.3 11.5 11.6 11.9 12.1 11.7 12.2 12.7 12.2 11.7 11.9 12.7 12.2 11.7 11.9 12.1 12.1 12.2 11.6 12.1 12.6 12.6 12.5 13.0 12.9 13.1 12.5 12.6 12.8 13.0 12.9 13.1 12.5 12.6 12.8 13.0 12.9 13.1 12.5 12.6 12.9 13.1 12.5 12.6 13.0 12.5 12.5 12.8 13.3	(Day) 13.8	7 14 21 28 35 42 49 5 13.8 13.0 12.1 12.5 13.6 12.9 12 12.6 12.1 11.7 11.3 11.6 11.9 11.5 11.7 10.5 12.3 12.7 12.2 11.7 11.5 11.5 11.6 11.6 12.7 12.2 11.7 11.9 12.1 12.2 12.6 12.6 12.5 12.4 12.2 12.6 12.6 12.5 12.5 12.6 12.8 13.0 12.9 13.0 12.9 13.1 12.5 12.6 12.5 13.0 12.6 12.5 12.6 12.7 12.9 13.0 12.9 13.0 12.9 12.1 12.7 12.6 12.5 13.0 12.6 12.5 12.8 13.0 12.4 12.1 11.9 12.1 12.4 12.5 12.7 12.1 11.9 12.1	e (Day) 35 42 49 56 36 35 35 35 35 35 35 35 35 35 35 35 35 35	7 14 21 28 35 42 49 56 13.8 13.0 12.1 12.5 13.5 12.9 12.5 13.6 12.9 12.5 13.6 12.9 12.5 12.6 12.9 13.5 12.2 12.1 11.7 12.9 11.6 11.9 11.7 12.1 11.3 11.6 11.9 11.5 11.3 11.5 11.5 11.5 11.5 11.5 12.1 12.1 12.1

APPENDIX 4-F1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

0 ppm Female

No. 82014					1 1 1 1 1 1 1												7 7 7 7 7 7 7 7 7		
Experimental				182	11.4	12.9	10.8	10.0	11.9	11.3	12.1	12.4	13.1	13.1	12.7	14.0	12.14	12	1.126
[X]	7)			154	13.5	13.6	12.8	11.5	13.0	12.5	12.7	12.8	12.6	12.9	12.2	13.1	12.77	12	0.560
	od Consumption (g/Animal/Day			119	11.9	12.2	11.6	10.3	12.0	11.7	11.6	12.5	13.1	13.5	11.8	12.0	12.02	12	0.803
	mption (g/			91	12.5	13.0	11.9	10.8	12.0	11.9	11.7	12.0	12.4	12.6	12.0	12.8	12.13	12	0.584
	Food Consu		(Day)	84	11.6	13.3	11.7	11.0	12.2	11.6	11.4	12.5	13.1	11.9	12.7	12.5	12.13	12	0.709
				77	2	2	2	0	-	-	2	7	13.7	2	-	2	12.23	12	0.827
				70	•	•	2	-	•	0	-	2	12.3	'n	7	•	12.08	12	
				63	2.	ς,	ä	ä	_ `	-	2	2	13.9	2	2	2.	12.33	12	0.883
		Cage		Number	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	Mean	Z	s.D.

4-F1-3APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Female udd 0 Level and Sex:

₹.				 														
No. 82014																 		
Experimental N			518	12.8	13.2		. ~	ς,	س	•	13.5	М			•	13.43		0.711
X 과	(<i>Ā</i>		483	13.3	13.0	ι.	7	5	4.	3.		٠ ٣	س	14.4	2		12	1.081
	(g/Animal/Day		392	12.9	12.4	12.8	7	2	ж •	-	12.1	س	ω.	12.6	12.2		12	0.691
	Consumption (g		365	11.8	11.8	3	-	-	H	0	11.3	-	. 11.6	11.2	14.0	11.74	12	0.922
, ,	Food Cons	(Day)	301	12.7	12.3	13.8	11.6	12.7	12.4		12.1	12.4	14.3	12.5	12.3	12.61	12	0.740
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			273	2	2	2.	i.	2	-	2	H	ω,	4.			12.57	12	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			10	2	2	ω,	H			H	2	2.	0	•	2	_		0.746
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			210	ω.	ж •	ش	_;	2	· ·	2	2	2	4.	12.6	m	12.71		0.909
	Cage	1	Number	00	00	00	00	00	00	00	00	00	01	1011	1012	Mean	Z	S.D.
			•															,

APPENDIX 4-F1-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex: 0 ppm

Female

Experimental No. 82014																			
E					4	5.	15.5	3		13.4	9	16.1	•	16.5		18.5	14.86	11	
	(g/Animal/Day			200		4.	15.3	9	×	14.5	18.0	15.9		16.4					1.554
	Consumption (g,			665	15.0	15.5	9	15.7	6.	5.	17.7	15.8	13.7	15.9	14.1	16.1	•	12	1.317
	Food Consum		(Day)	637	15.7	13.7	•	16.3	5.	16.3	14.8	17.0	16.7		16.4	18.3	16.18	12	1.139
				609	7.	5		-	9	H		7	4.	ъ 8	9	3	5.		2.365
		t		574	4.	4.	4.	ж •	5.	2	13.2	ش	4.	9	щ •	16.2	4.		1.160
				546	3	٠	α	<u>.</u>	4.	ش	13.6	4.	Ŋ.	т •	4.	16.1	\sim		1.964
		Cage		Number	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	Mean	Z	S.D.

X : No animals existed

APPENDIX 4-F2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex :

10 ppm Female

] 			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
No. 82014																		
Experimental			56	12.7	12.5	т т	•	13.9	2	12.7	12.4	2.	13.0	•	14.5	12.93	1.2	0.651
Ex]	Λ)		49		2	ς,	2	14.4	2	2	12.5	13.3	13.7	13.7	14.8			0.817
	(g/Animal/Day)		42		-	•	2	13.9	2	12.1	2.	•	14.0	•	15.8	13.17	12	1.119
	tion		35	12.2	•	4.	٦.	12.8	-	2	12.1	12.6	13.2		13.6	•		0.867
	Food Cons			12.4	H	ω,	7	2	2	ς,	12.7	•	÷	-		2.	12	0.493
			21	2	-	2.	س	3	2.	2	•	2	2	ij	13.8	2	12	0.624
			14	2	2	ω,	2	ω,	7	2	•	5	2	ж Э	14.2	0	T.2	0.981
			7	2.	2	2	2	ω.	i.	2	•	2.	3	•	13.7		7.T	
		Cage	Number	107	10	10	10	10	10	10	10	10	11	11	1112	Mean		S.D.

APPENDIX 4-F2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex:

10 ppm Female

No. 82014			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1												; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;				
Experimental			182	11.7	٠	•	12.2	٠	•	•	•	•	•	13.8	• 1	13.04	12	0.645	
IX日 IX日	<i>Y</i>)		154	13.2	т С	т С	. 2	4	т М	m	•	т С	٠ س	12.6	14.2	13.29		0.596	
	(g/Animal/Day		119				11.3				11.8				13.4	12.36	12	0.858	
	Consumption (g/		91		•	ښ •	H	5	•	i.	12.5	•	•	•	14.4	12.53	12	0.848	
	Food Consu	(Dav)	84	13.0	•	13.6	12.0	13.2	•	11.5	•	12.4	13.7	12.7	14.5	12.58	12	1.078	
	1 to 10 to 1		77	2	-	3	2	3	2	2	12.0	2	2	2	3		12	0.475	
			7.0	•	-	ъ С	2	ς,	2	2	2	2	т С	-	12.9		1	0.680	
	 		63	1 .		ω,	2	4.	т М	2		ω,	, m	2	13.4		5	0.729	
		Cage	Number	10	10	10	10	10	10	10	10	10			1112) 2	S.D.	

APPENDIX 4-F2-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex:

10 ppm Female

Experimental No. 82014 12 13.07 115.6 113.6 113.6 112.0 112.0 112.0 112.0 112.0 13.38 1.176 14.5 13.5 14.4 11.2 12.6 13.1 13.6 12.9 12.8 12.2 15.6 483 Food Consumption (g/Animal/Day) 12 0.726 12.88 13.4 13.5 113.8 112.7 112.7 111.1 12.8 13.7 12.9 13.0 392 12 0.643 11.48 112.3 111.3 111.3 110.8 111.2 111.2 111.2 365 (Day) 301 12 13.08 113.5 112.0 112.0 112.1 113.1 14.3 13.0 13.4 13.4 12.38 12 0.570 112.0 1122.0 1112.0 112.3 112.8 112.1 112.5 112.5 113.7 273 12.41 12 0.803 122.3 112.3 111.6 113.8 111.8 111.8 13.2 11.1 13.5 245 12.55 12 0.706 Number Cage 1105 1106 1107 1108 1109 1110 1102 1103 1104 1112 Mean Z

4-F2-4 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Consumption Data Individual Food

mdd 10 Level and Sex:

Female

82014 Experimental No. 14.62 11 1.539 15.5 14.3 14.4 14.2 14.7 111.4 111.4 115.0 Food Consumption (g/Animal/Day) 14.51 11.293 16.5 16.0 14.4 115.1 114.6 112.5 114.0 15.4 × 115.7 115.7 113.7 113.7 114.1 114.1 117.3 117.3 114.3 (Day) 14.65 115.3 115.3 114.0 114.3 114.1 114.2 116.7 15.19 16.5 118.0 118.0 113.7 113.9 114.7 118.7 609 13.93 144.9 11124.1 1124.1 1133.3 1133.3 1133.3 1133.3 1133.3 1133.3 13.00 1122.3 1122.3 1122.0 1112.9 1142.3 116.9 546 Number Cage 11101 1102 11103 11104 11105 11107 11109 11110 Mean

: No animals existed ×

12 1.709

12

1.957

12

APPENDIX 4-F3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm

Female

			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																
			56	13.2	ო	•	÷ ,	_;	•	-	•		12.1	т. С		12.25		1.159	
1	Λ)		49	•	13.5	•	•	ij		٠	12.5	2.	2	٠ <u>.</u>	14.0	12.55	12	1.024	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Consumption (g/Animal/Day		42	•	12.8	•	•	•	•	•	•	11.8	12.3	13.4	13.4	12.45	12	0.874	,
	umption (g		35	13.1	13.6			2	•	$\vec{\vdash}$	12.1	12.4	12.3	13.6		12.68	12	0.848	, 11 11 11 11 11 11 11 11 11 11 11 11 11
	Food Consi	(Day)	28	12.7	13.4	11.5	12.3	12.4	11.4		•	11.6	•	12.6	13.4		12		
			21	3 1		2	2	-	0	-	11.8	-	-	13.4	13.0	12.28	12		
			14	1 8		ر. ای	7	2	-			2	12.6		13.1		122	0.651	
	! ! !		7	1 6	, ~	2	, ,	· -	· -		•	· 		•	13.0	1		0.655	
		Cage	Number	10	10		10	10	10	1 C	1208	1 0	1 C	1 C	1212	Median	ממנו	s.D.	

APPENDIX 4-F3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm

Female

. No. 82014	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		; ; ; ; ;																
Experimental		182	13.4	, m	12.0		11.4	12.4	, I ~) (7. C. C		0.71	13.9	1		ا د د	0.812	
â	ау)	154	1 4	15.3	2	2		2	ς.	,	1 ~	•) (•	1 H	1	13.41	, ,	1.097	
	(g/Animal/Day	119		13,3	•	Η.	т М		2	~	·	0		14.1		13.41	5	1.085	
	onsumption (c	91	14.0	•	÷	12.4	7		-	2				13.6		12.67	12	0.966	
	Food Cons	(Day) 84	14.2	13.1	11.4	12.1	•	11.6	•	•	•	12.5		13.3		12.52	12		
		77	12.5	•	•	٠	•	•							1	12.56	2	0.772	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		7.0	13.0	•	•	•	•								1	12.11		0.939	
		63	13.6	'nμ	• - c	V C	· Vr	-	<u>.</u>	• •	_	-	·	m	1 (12.38			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cage	Number	1201	7 C	9 C	2 0	3 (2 0	$\frac{1}{2}$) 	20	7	디	는 건		Mean	Z	S.D.	

4 - F3 - 3APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Female 100 ppm Level and Sex:

		518	15.0	3	4.	4.	2	5	2	•	•	13.0	13.7	15.2	13.48	12	1.141
у)		483	•	•	•	5.	4.	ж •	ж Э	•	•		•	16.2	14.48		
ı 🔪		392	•	٠	•	•	•	•	•	•	•	•	•	٠	13.02	12	1.220
ion (365	•		•	•	•	•		•	•	•	•	•	11.22		
Food Consi	(Dav)	301	13.4	11.8	12.6	12.1	10.5	11.4	12.7	۰					12.16	12	0.910
		273	4.	2	т С	2	-		-	_;	~i	•	•	·		12	0.977
		245	T	~	₹.	2	ω,	ς'	ς,	_	~	·	•	•			
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		210	ا	ζ,	ω,	i.	ω.	-		0	~	~i	<u>.</u>	•			
	Cage	Number	20	20	20	20	20	2.0	2	20	20	7	Ξ	Ξ	Mean	Z	S.D.
	ood Consumpti	Food Consumption (g/Animal/	Food Consumption (g/Animal/Day) (Day) 365 392 483 51	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 13.4 12.0 15.5 14.9 15.	Cage (Day) 245 273 301 365 392 483 518 201 15.0 14.2 13.4 12.0 15.5 14.9 13.6 13.3	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.0 202 12.3 14.0 12.9 11.8 11.8 13.6 13.5 203 13.4 12.6 11.8 11.3 13.7 14.0	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.8 202 12.3 14.0 12.9 11.8 11.8 11.3 13.7 14.2 203 13.4 14.2 13.1 12.6 11.8 11.3 13.7 14.2 204 11.2 12.5 12.1 11.3 12.7 14.5	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.6 14.2 13.4 11.8 11.8 13.7 14.2 203 11.8 11.8 11.3 13.7 14.2 204 11.2 12.6 11.3 12.7 15.6 14.9 12.6 204 11.3 12.7 15.6 14.9 12.8 204 11.3 12.7 15.6 14.9 12.8	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.0 13.4 11.8 11.8 13.9 13.6 13.6 14.2 13.6 11.8 11.8 11.3 13.7 14.2 204 11.2 12.6 11.3 12.7 15.6 14.9 12.0 13.7 13.6 11.9 10.5 11.2 12.6 14.9 12.0 11.2 12.0 11.2 11.4 10.4 11.8 13.8 12.9	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.6 202 12.3 14.0 12.9 11.8 11.8 11.3 13.7 14.2 203 13.4 14.2 12.6 12.6 11.8 11.3 12.7 14.9 204 11.2 12.6 11.9 10.5 11.2 12.6 14.9 12.6 205 11.2 12.0 11.2 11.4 10.4 11.8 13.8 12.7 206 11.2 12.0 11.3 12.7 13.8 12.0 207 11.8 13.0 11.3 12.7 13.8 12.0	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.5 13.4 11.8 11.3 13.7 14.9 15.6 11.2 12.6 11.8 11.3 12.7 15.6 14.9 12.5 13.7 13.6 11.9 10.5 11.2 12.6 14.9 12.8 12.7 13.8 12.7 13.8 12.7 10.8 11.8 13.0 11.3 12.7 10.2 13.4 13.8 12.7 10.8 11.6 11.0 10.8 11.1 11.1 11.4 11.4 11.4 11.4 11.4 11	Cage umber 210 245 273 301 365 392 483 518 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.5 13.4 14.2 11.8 11.8 11.3 12.7 14.9 12.0 13.7 13.6 11.9 10.5 11.2 12.6 14.9 12.6 13.8 12.7 13.8 12.7 10.8 11.8 13.8 12.7 13.8 12.7 10.8 11.8 13.8 12.7 10.8 11.1 11.4 14.0 11.3 12.7 13.6 13.8 12.7 10.8 11.6 11.0 10.8 11.1 11.4 14.0 11.3 12.7 14.9 13.8 12.0 13.5 12.0 12.6 11.2 13.7 14.9 13.8	Cage Laber 210 245 273 301 365 392 483 518 Laber 210 245 273 301 365 392 483 518 Laber 210 14.2 14.2 13.4 12.0 15.5 14.9 15.5 Laber 202 12.3 14.0 12.9 11.8 11.8 13.9 13.7 14.9 Laber 204 11.2 12.6 12.5 12.1 11.3 12.7 15.6 14.9 Laber 205 11.2 12.0 11.2 11.4 10.4 11.8 13.8 12.7 Laber 206 11.6 11.0 10.8 11.1 11.4 14.0 11.8 Laber 208 14.0 13.5 12.0 12.6 11.2 13.4 13.8 12.7 Laber 209 14.0 12.4 11.8 12.3 10.3 12.4 13.7 13.7	Cage umber 210 245 273 301 201 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15.1 11.2 12.6 11.8 11.3 12.7 14.9 15.6 11.2 12.6 11.8 11.3 12.7 14.9 12.0 11.2 12.0 11.1 11.2 12.0 11.8 13.8 12.7 14.9 12.0 11.8 13.0 11.3 12.7 15.6 14.9 12.0 11.8 13.0 11.1 11.4 10.4 11.8 13.8 12.7 10.2 13.4 13.8 12.0 12.0 12.0 12.6 11.2 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 14.9 13.7 13.6 14.5 12.3 10.3 11.5 13.7 13.7 13.8 13.8 12.3 11.3 12.4 13.7 13.5 13.6 14.5 13.7 13.7 13.5	(Day) 365 392 483 518 15.0 14.2 14.2 13.4 12.0 15.5 14.9 15. 13.4 12.0 11.8 11.3 13.7 14. 12.0 12.6 13.6 13.6 13.7 14. 12.0 11.2 12.6 11.8 11.3 13.7 14. 12.0 11.2 12.6 11.8 11.3 13.7 14. 12.0 11.2 12.6 14.9 12.1 11.3 12.7 12.6 14.9 12.1 11.8 13.0 11.2 12.7 10.2 13.4 13.8 12.1 10.8 11.6 11.0 10.8 11.1 11.4 14.0 11.8 12.0 12.4 11.8 12.3 10.3 12.4 13.7 14.9 13.7 13.6 14.5 12.2 12.3 11.5 13.6 14.6 13.7 13.8 12.3 11.5 13.6 14.6 13.7 13.8 12.3 11.5 13.9 16.2 15.3	Cage Cage	Cage (Day) (Day) (Day) (Log) (Lo

APPENDIX 4-F3-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Female

Experimentar NO. 02014																		
4			728	15.3	4.	7	4	14.2		2	13.1		т С	16.2		14.57	10	1.448
	Animal/Day		700	16.7	70		5	2		٠	14.2		14.3	14.9		14.67	11	1.500
	ood Consumption (g/Animal/Day		999	17.0	14.5	7.	15.7	5	14.4	-	13.3	×	13.6	15.6	•	•	77	1.712
	Food Consu	(Dav)	637	17.2	4.		•	5			13.9	4.2	•	٠	16.3	15.28	12	1.252
			609	5.	3	9	ω.	7	υ. •	4.	4.	9	5.	2	15.6	4	12	
1 1 1 1 1 1 1 1 1			574		4	ъ.	5.	4.	ς.	4.	2	9	2	4.	13.6	4	12	1.142
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				6.	4.	Ŋ.	δ.	4.	•	3	ω,	&	4.	4.	14.9	٠ ٣	12	
	1	cage	mn.	20	20	20	20	20	20	20	20	20	21	21	1212	ea	Z	S.D.

X : No animals existed

APPENDIX 4-F4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Female

			8.	&	-	ຠ ∵	4		0	2	m	4	7		13	39
		56	$\overline{}$	0	,	\sim	-	\sim	3	-	11.	13.	12.	13.	12.	0.0
(V)		49	•		5		5	٠ ٣	12.6	2	13.3			12.6	12.48	0.706
(g/Animal/Day		42		•	•		12.3	2	12.7	12.1	13.4	13.0		13.0		0.542
Consumption (g		35	-	•	م	2		ъ.	ж •	12.2	13.1	13.0	13.3	12.9	12.83	
Food Cons	(Day)	28	12.1	2	13.0	11.3	12.0	2.	12.2	2	13.3	2	12.4	12.4	2.	12 0.537
		21	-		2	-	ä	2	3	2	13.3	2	2.	•		12 0.687
		14	2 -		-		2	2	-	12.1	4.	2	2	13.2		12 0.720
		7	1 2			-	2	٣.	. 2	2	\sim	٠,	, _, , ~,	•	12.53	12 0.614
	Cage	Number	1 C		\sim		\circ	\cdot	\circ	0	0	-	-	1312	 Mean	S.D.

APPENDIX 4-F4-2

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Level and Sex : 1000 ppm Female

				-													
		182	12.1	11.5	•	•	•	•	12.3	•	•	٠	13.2	. 1	12.04	12	099.0
·		154	12.8	5	3	•	7	4.	-	• —i	5	5	2	13.4	12.51	12	1.053
(g/Animal/Day		119	12.2	11.9	10.9	11.0	12.0	11.5	11.4	11.4	12.3	•	•	12.9	11.71	12	0.611
		91	12.4	12.1	13.0	11.6	12.2	12.5	13.5	10.4	12.2	12.8	13.0	•	12.37	12	0.797
Food Consumption	(Day)	84		13.1		11.1			12.6				11.3	14.2	12.42	12	0.800
		7.7	2	2	3	11.8	2.	ж Э	2	÷	2	2	2.	7	12.53	2	
		70	2.	2.	3	12.2	٠ ٣	ж Э	2	2	2	2	2	4.	12.82	\sim	
		63	1 7	-	ς,	11.9	2	ω,	ω,	-	ς,	ω,	2	2		$^{\circ}$	0.739
	Cage	Number	30	30	30	0	30	30	30	30	30	31	31	1312	Mean	Z	S.D.

4 - F4 - 3APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Food Consumption Data

Female 1000.ppm Level and Sex:

. H1340000018414 •	Food Consumption (Day) 301 12.9 11.0 12.1 11.0 12.3 11.6 11.7 10.9 10.9 10.9 11.5 10.9 11.5 12.03 12.03 12.03 12.03 12.03 12.03	ion (g/Animal/Day)		65 392 483 518	.3 13.2 14.0 13.	.0 13.5 12.1 1	.4 12.8 11.7 1	.0 11.9 13.0 1	.8 14.6 13.6 12.	.6 13.2 13.6 1	.5 11.5 14.1 12.	.0 12.7 12.2 11.	.4 12.9 13.6 1	.5 12.3 13.5 12.	.0 14.3 14.9 1	.5 13.5	08 13.03 13.38 12	12 12 1	91 0.900 0.964 0.7
273 13.2 13.4 12.9 12.4 12.6 13.7 13.9 13.0 13.9 13.0 13.13				245	2.	2	т С	2	-	س	H	2	2.	2	ъ т	ж Э	12.63	12	0.702
273 2.7 13.2 2.1 13.2 3.3 3.3 13.1 12.9 12.9 13.1 12.2 2.5 13.6 13.6 13.6 13.6 13.6 13.6 13.6 13.7 13.6 13.7 13.8 13.9 13.9 13.0	4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			210	2.	س	l	0	2		-	0	-	-	2	4.			
10 245 273 2.2 12.7 13.2 3.2 12.1 13.4 1.8 12.1 12.9 2.4 11.9 12.9 1.6 11.6 12.6 1.9 12.5 13.6 1.9 12.63 13.1 1.96 12.63 13.1 1.96 12.63 13.1	10 2.2 3.2 1.8 1.8 1.5 1.5 1.9 1.9 1.96 1.1 1.96 1.2 1.96 1.2	 - - - - - - -	Cage	Number	30	30	30	30	30	30	30	30	30	31	1311	31	Mean	Z	S.D.

APPENDIX 4-F4-4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Female

Experimental No. 82014																	
EXP	,	728	13.3	ω .	13.3	4	9	ς,	10.8		10.1		17.1		14.30		2.395
	(g/Animal/Day	700	13.8	•	13.2	4	9	4.	ъ.	4.	14.4	14.9	17.4	Ю		\sim	1.206
	Consumption (g/	999	14.7	9	3	4.	ς,	ς,	•	3	13.8	\sim		13.9		12	1.129
 	Food Consu	(Day) 637	14.6	16.3	13.3	15.1		12.3	15.0	13.5	14.1	13.2	14.5	13.0	14.13	12	1.110
: : : : :		609	2 .	15.2	3	м	ж Э	ġ	4.	2		4.	15.1	16.3	•		1.289
		574	14.1	15.3	13.9	3	4.	4.	4.	3	т М	4.	5.	3	•		0.742
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		546	1 6	14.3	2	2	4.	т М	т М	2	13.4	12.3	9	15.0	•	12	1.242
	0	Number	30	0	30	30	30	30	30	30	0	31	31	1312	rrt .	Z	S.D.

3+ ; SEVERE

2+ ; MODERATE ,

1+ ; SLIGHT ,

TR ; TRACE ,

- ; NEGATIVE >

APPENDIX 5-1-M1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 0 PPM MALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

																•									
	¥:	726	\sim	2	N	\sim	\sim	\sim	\sim	2	\sim	2	N	\sim	\sim	N	N	α	\sim	N	\sim	N	α	N	\sim
UROBILINOGEN	(E.U./DL)		₽	€	ewl	2	2	←	←	<u>~</u>	-		~	2	₹	← 1	← 1	 1	←1	~ 1	ત્ન		- -1	ę⊶I	Ţ
OCCULT BLOOD		. 1	·I	ī	TR	1	3+	ı	l	+	ı	ı	ı	I	Š.	1	I	Į	1	I	1	ı	ı	1	TR
BILIRUBIN						5+			1	1	+		1		+			+		ı	1	+	ı	î	!
KETONES	(MG/DL)	Ŋ	ស	ı	Ŋ	2	ı	i	1	ı	i	1	ı	2	15	ı	ı	ι'n	S	1	1	i	1	ı	I
GLUCOSE ,	(G/DL)	0.1	0.1	0.1	1	0.1	1	i		8	•		•		0.1	0	•	3		0				0.1	
PROTEIN	\ 1	M	30	30	30	>300	30	10	30	30	30	30	10	30	30	30	30	30	30	30	30	10	30	30	10
Η		. 7	9	2	7	7	7	7	7	2	7	4 9	7	9	7	7	9	7	2	7	7	7	7	7	80
ANIMAL	NUMBER	₽	2	М	7	ın	9	6							19										

3+ ; SEVERE

2+ ; MODERATE ,

1+ ; SLIGHT ,

TR ; TRACE ,

- ; NEGATIVE ,

APPENDIX 5-1-M2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 10 . PPM

MALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

	. !	٠														•							•		-
	(DAY)		N	2	2	2	2	N	\sim	2	\sim	\sim	\sim	726	\sim	\sim	Ń	\sim	2	\sim	2	\sim	\sim	\sim	2
UROBILINOGEN	(E.U./DL)	⊣	←4	←1	2	←		←	←	←	7	←	←	←1	, 	←	←	 1	←	- -1	ℯ┥	₽	₽	₽	₽
OCCULT BLOOD		l	1	ı	í	1	ı	ı	i	ı		ı	ı	į	i	<u>ا</u>		1	+	1	í	2+	ı	ì	
BILIRUBIN			+	ı	+				++		•	+	1	1	1	1+	ı	7+	ı	ł		÷		-	+
KETONES	(MG/DF)		Ŋ	1	1	ı	ĽΛ	ſΛ	ιν	i	Ŋ	Ŋ	l	1	1	ſΛ	ហ	ı	ı	Ŋ	īV	Ŋ	ı	īV	Ŋ
GLUCOSE	(8/DL)			. 0	1		0	•		0		•	6	0.1	•		4	0			•	0	•	•	
PROTEIN	(MG/DF)	100	30	30	30	10	30	30	30	30	30	30	30	30	10	10	30	30	30	30	30	30	10	30	
ЬН			~	. ~	. ~	2	~	7	2	2	2	. ~			~	7	7	. ~	ω	∞	9		. ~	~	• • •
ANIMAL	5 N	10	C) C	0	0	0	-	-	-	· ~	· <-	1 N	· 0	N	2	\sim	ı N	2	M	~) K) M) M	140

3+ ; SEVERE

TR ; TRACE , 1+ ; SLIGHT , 2+ ; MODERATE ,

- ; NEGATIVE ,

APPENDIX 5-1-M3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 100 PPM

MALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

	(DAY)	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	2	726	\sim	2	\sim	2	\sim	\sim	\sim	\sim	$^{\circ}$	$^{\circ}$	$^{\circ}$	\sim 1
UROBILINOGEN	(E.U./DL)	H	← 1	2	Ţ	←	←1	~	~	2	~	7	₽	₽	↽	· ←	7	⇌	←1	~	←	Ţ	· ————————————————————————————————————	2	H H H H H H H H H H
OCCULT BLOOD		!	ı	1		TR	1	i		1	1	ì	1	1	1	1	2+	1	1	ı	i	1	1	1	
BILIRUBIN		 		3+		ī	+			+			1+		1+				1+	ı	1	+		+	
KETONES		I	1	ហ	1	. 1	ı	i	į	1	i	ហ	Ŋ	1	Ŋ	1	Ŋ	i	ı	ı	ı	Ŋ	1	ιΛ	ı
GLUCOSE					. ~			•		•	•	•	0.1		i	ı	0	0.1		0	•		•		0.1
PROTEIN	9		10	3.0	30	30	30	30	30	10	30	30	0	10	10	30	30	30	30	30	30	0 0	30	30	100
ЬН			۰ ۲	. ~	. ~	. ~	. ~	. ~	. ~	_	. ^	. ^	. ~			. •<) i~		. 2		. 2	. ~	. ^	. ^	. ~
ANIMAL		1 6) C) C) C) C) C) C	, ~	1	1 <	4 ←	٠,	· ~	٠,	٠.	+ ~	· <-	1 C	10	υ	1 C	1 0	ı Λ	229

APPENDIX 5-1-M4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 1000 PPM

MALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

	(DAY)	2	N	\sim	\sim	\sim	2	\sim	\sim	\sim	\sim	\sim	\sim	2	\sim	\sim	\sim	2	\sim	\sim	\sim	726	\sim	\sim	2
UROBILINOGEN	(E.U./DL)	←	↤	ᠳ	.←	~ 1	~	—	←1	₽	← d	- -1	7	←	근	H	← I	↤	₽	-	←	←	-	-	~
OCCULT BLOOD		1	ı	I	į	ı	ı		ı	1	1		1	1	I	ſ	⊣R	1	TR	i	i	ĵ	1	ı	
BILIRUBIN		 	+		ı	ı	+	+	ı	1+	i	+		. +1	ŧ	+		ı	+	i	+	i	ı	+ [+
KETONES	(MG/DL)	 	ហ	. 1	ı	ì	I	15	ī	ιv	1	Ŋ	ľ	i		7	. 1	i	ſΛ	Ŋ	. 1	1	î	1	ι Λ
GLUCOSE		10					•	0.1	•	0.1	0.1			•			0 0			•		0.0	•	a	
PROTEIN		30	10	3.0	30	30	0 0	30	0	30	3	30	30	30	5	7 0	0 0	30	30	30	7 (10	0	30	2300
Ηd		7	۰ ۸	. ~	. ^	. ~	. ^	. ~			. ^	. ~	. ~	. ~	. ^	. ^		. ~	. ~	. ~	- 1	. ^	· v c	^	. ~
ANIMAL	NUMBER	1 6) C) C	\circ) C	\circ) C	·	· <-	4 ~	4 ←	4 ←	4 ~	1 C	υ υ	u n	ıΛ	1 W) M	7 M) ド) M) r	338

3+ ; SEVERE 2+ ; MODERATE , TR ; TRACE , 1+ ; SLIGHT , - ; NEGATIVE .

APPENDIX 5-1-F1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 0 PPM

FEMALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

-	1						•																		
(DAY)	C 1	727	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	2	\sim	\sim	2	\sim	\sim	\sim	\sim	\sim	$^{\circ}$	\sim	2
UROBILINOGEN (F.U./DL)	1 0 1	₹-1	7	—	←	ᢏ┥	←1	↽		0.1	₹	T.	←	↽	←	ત	⊣	-	Н	H	(-1	7	←	←	₽
OCCULT BLOOD			2+	1	1	1	1	ţ	i	1	•	1	1	1	1	1	i	1		ı	1	1	ı	H R	
BILIRUBIN		ı	ı	1	ı	+	i	i	i	i	i	1	i	i	ł	i	1	ı	1	ı	1	i	ı	ı	t
KETONES	ופ	1	ı∩	72	1	ſΛ	ı	1	Ŋ	ı	Ŋ	1	Ŋ	i	Ŋ	ı	ı	ı	1	i	ı	Ŋ	i	ı	ŧ
GLUCOSE) I	0.1		0.1					0	0.1	0		ı	0	•	•		8		0.1			0.1		1
ROTE	(MG/DL)	\circ	\circ	0	0	>300	\circ	\circ	\circ	\circ	0	0	0	2	\circ	\circ	0	\circ	0	0	0	0	0	M	30
H	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	∞	9		∞	7	7	8	7	8	2	7	~	80	7	2	~	7		80	7	. ~	- 00	∞	∞.
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3+ ; SEVERE 2+ ; MODERATE , - ; NEGATIVE , TR ; TRACE , 1+ ; SLIGHT ,

3+ ; SEVERE

2+ ; MODERATE ,

- ; NEGATIVE , TR ; TRACE , 1+ ; SLIGHT .

APPENDIX 5-1-F2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 10 PPM

FEMALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

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APPENDIX 5-1-F3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 100 PPM FEMALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

(DAY)		J N
UROBILINOGEN	 	-l -
OCCULT BLOOD	 	1
BILIRUBIN	 	ı
KETONES (MG/DL)	 4 	V 1
GLUCOSE (G/DL)		
PROTEIN (MG/DL)		\circ
H H	 8	. 49
M M	11200 12003 12003 12003 12003 12003 12003 12003 1200 1200	23

3+ : SEVERE 2+ : MODERATE , TR ; TRACE , 1+ ; SLIGHT , - ; NEGATIVE ,

5-1-F4 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

M d d LEVEL AND SEX: 1000

FEMALE

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

		10
	7227 7227 7227 7227 7227 7227 7227 722	
UROBILINOGEN (E.U./DL)		
OCCULT BLOOD		, L
BILIRUBIN	+ + + + + + + + +	
KETONES (MG/DL)		
GLUCOSE (G/DL)	11111 1111 1111 1111	- -
PROTEIN (MG/DL)		1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Н	 \ \ \ \ \ \ \ \ \ 	!
ANIMAL	MANANANANANANANANAN	

APPENDIX 5-2-M1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 0 PPM . MALE

ANIMALS KILLED IN EXTREMIS

EXPEKIMENIAL NO. 82014 	UROBILINOGEN	(E.U./DL) (DAY)	1 435	1 356	8 686	0.1 347	
	OCCULT BLOOD		 	1	2+	1+	
	BILIRUBIN		+ + + + + + + + + + + + + + + + + + + +	1	3+	1+	
	KETONES	MG/	1	15	ιΛ	1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	GLUCOSE		0.1	0.1	0.5	0.1	
	PROTEIN	\sim	100	30	100	>300	
	H H		9	∞	9	9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ANIMAL	NUMBE	16	29	34	52	

3+ ; SEVERE 1+ ; SLIGHT , 2+ ; MODERATE , TR ; TRACE , - ; NEGATIVE ,

APPENDIX 5-2-M2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

MALE
PPM
10
SEX :
AND
EVEL

ANIMALS KILLED IN EXTREMIS

! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! ! !		EXPEKIMENIAL NO. 82014	r 4
	G H	PROTEIN	GLUCOSE	KETONES	BILIRUBIN	OCCULT BLOOD	UROBILINOGEN	
NUMBER		(MG/DF)	(9/0/)	(MG/DL)			(E.U./DL)	(DAY)
112	9	 	1 1 1 1 1 1 1 1 1	! ! ! ! ! ! !	 		 	537
	9	100	ı	ı	+	i	←	519
	7	100	0.1	1	i	5+	↤	779
	9	100	ı	0 7	1+	2+	↤	999

3+ ; SEVERE 2+ ; MODERATE , 1+ ; SLIGHT > TR ; TRACE , - ; NEGATIVE ,

APPENDIX 5-2-M3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 100 PPM MALE

ANIMALS KILLED IN EXTREMIS

ANIMAL	H	PROTEIN	GLUCOSE	KETONES	BILIRUBIN	OCCULT BLOOD	UROBILINOGEN	
NUMBER		(MG/DF)		(MG/DL		\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(E.U./DL)	(DAY)
		1	0.25	0 7	3+	3+	7	463
) / C	- 4	005<	1	1	ı	ਮ	+	671
747	0 0	×300	0.1	i	7+	1	2	240

3+ ; SEVERE 2+ ; MODERATE , 1+; SLIGHT > TR ; TRACE , - ; NEGATIVE ,

APPENDIX 5-2-M4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 1000 PPM

MALE

ANIMALS KILLED IN EXTREMIS

	! 	(DAY)	588
ENTAL NO. 8201	UROBILINOGEN	(E.U./DL)	2 1
	OCCULT BLOOD		+ + + + + + + + + + + + + + + + + + + +
	BILIRUBIN		
	KETONES	(MG/DF)	
	GLUCOSE	(G/DL)	0.1
	PROTEIN	(MG/DF)	100 TR
	H H		99
	ANIMAL	NUMBER	307

3+ ; SEVERE 2+ ; MODERATE , 1+ ; SLIGHT , TR ; TRACE , - ; NEGATIVE ,

APPENDIX 5-2-F1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 0 PPM

FEMALE

ANIMALS KILLED IN EXTREMIS

ANIMAL	ЬН	PROTEIN	GLUCOSE	KETONES	BILIRUBIN	OCCULT BLOOD	UROBILINOGEN	
NUMBER		(MG/DL)		(MG/DF)			(E.U./DL)	(DAY)
		! !		1	+++++++++++++++++++++++++++++++++++++++	1	← 1	691
000	. `), 2), 2), 0), 0	~)	+	+	0.1	596
200	0	OOT	1.0	l	-	- (i	
015	9	100	i	Ŋ	+	<u>~</u>	1.0	0.4
1043	9	30	1	ı	7+	+ [, 	80/

3+ ; SEVERE 2+ ; MODERATE , 1+ ; SLIGHT > TR ; TRACE , - ; NEGATIVE ,

APPENDIX 5-2-F2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 10 PPM

FEMALE

ANIMALS KILLED IN EXTREMIS

ANIMAL	РН	PROTEIN	GLUCOSE	KETONES	BILIRUBIN	OCCULT BLOOD	UROBILINOGEN	
NUMBER		(MG/DF)	(P0/9)	(MG/DF)			(E.U./DL)	(DAY)
1119	9		1 1		 	TR	83	561
1139	7	100	0.1	1	3+	++	┍	680
1152	8	>300	0.1	1	i	++	0.1	729

3+ ; SEVERE 2+ ; MODERATE , TR ; TRACE , 1+; SLIGHT , - ; NEGATIVE ,

APPENDIX 5-2-F3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

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LEVEL AND SEX : 100 PPM FEMALE

ANIMALS KILLED IN EXTREMIS

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EXPERIMENTAL NO. 82014

	(DAY)	560
· UROBILINOGEN	(E.U./DL)	8 . 1
OCCULT BLOOD		TR
BILIRUBIN		. 3+
· KETONES	(MG/DL)	0 7
GLUCOSE	(B/DL)	0.5
PROTEIN	(MG/DF)	>300
H H H		9 9
 ANIMAL	NUMBER	1215

3+ ; SEVERE

2+ ; MODERATE ,

1+; SLIGHT,

TR ; TRACE ,

- ; NEGATIVE ,

APPENDIX 5-2-F4

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL URINALYSIS DATA

LEVEL AND SEX : 1000 PPM FEMALE

ANIMALS KILLED IN EXTREMIS

3+ ; SEVERE 2+ ; MODERATE , 1+; SLIGHT, TR ; TRACE , - ; NEGATIVE ,

APPENDIX 6-1-M1-1

4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 0 ppm Male

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014		(Day)	1 ~	ን ‹‹	733	3	m	(1)	~	(m	~	· ~	7) (*) (2	0	\sim	m	m	7.54	O.	m	സ	735
al No. 820	MCHC	(8)	1 6		34.1	3	0	4.	χ,	· ~	3	٠,	· ~	, ~		7	• 7 (7		بر د	04.L	,	33.1	M	ж Э
Experimenta	MCH	(pico gram)	7.	9	17.0	9	9	9	9	9	9	7	9	ິເດ			•	o r	٠,		• • v	•	16.3	٠	
	MCV	(cubic micron)	1:	2	49.8	7	4.	ъ 8	о О	0	Ф	-	о О	9	8			•		•	. ~	•	49.2	φ.	•
	Platelet Count	(10**4 /cmm)	8	ä	59.3	ω	4	-	ij	7.	2	4.	9	2	0	6		1 U	• > c	vc		,	02.0	• •	
	Hb Conc.	(g/dl)	14.7	10.1	14.0	•	٠	•	18.2		•	•	14.2	٠.		16.8					16.1		LO. C. C.		15.3
	Ht	(%)	3.	H	41.0	• -i 0	· œ	ъ.	4.	4.			2	4.	ъ В	0	-			. 4	<i>w</i>	u	, to	L	45.5
1 1 1 1 1 1 1 1	WBC	(10**2 /cmm)	25.		22.	. 12	. 12	23.	. 17	. 77	. u.	TO:	41.	.06	.08	33.	28.	23.	2.4	27	33.	41	• 5°		37.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RBC	(10**4 /cmm)	842.	9	200	0 <	441.	1014.	-1 c	ט כ	2	א ע	۰ و	4	~	$\overline{}$	2	$\overline{}$	10	9		4	1 10	1	~ i
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Animal	Number	r-1 (7 (v) <	t u	پ ال	o c	היר	1 7	7 T	# u) L	/ T	8 °	fΤ	20	23	25	26	28	30	31	, C	7 C

CONTINUED
6 - 1 - M1 - 1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 0 ppm Male

Animal Count Count <t< th=""><th>1 1 1 1</th><th></th><th></th><th>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</th><th></th><th></th><th></th><th>Experimental</th><th>tal No. 8201</th><th>14</th></t<>	1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				Experimental	tal No. 8201	14
Comm Comm	Animal	RBC	WBC	Ht	Hb Conc.	latele Count	MCV	MCH	MCHC	! ! ! ! !
A 801. A 11. A 40.0 A 13.3 A 2.7 A 49.9 A 16.6 A 33.3 73 957. 21. 47.0 15.8 67.7 A 49.9 A 16.6 A 33.3 73 518. 57. 31.0 10.0 25.2 59.8 19.3 32.0 73 1056. 29. 50.0 17.0 59.6 47.3 16.1 34.0 73 924. 45. 45. 13.8 62.8 44.1 14.6 33.3 73 1156. 39. 54.0 15.3 74.3 49.8 16.6 33.3 73 1120. 47. 45.0 18.0 62.9 46.7 15.6 33.3 73 1121. 47. 45.0 16.6 69.4 47.4 15.8 32.8 73 1076. 39. 51.0 16.6 69.4 47.4 15.8 32.8 73 923.2 37.1 45.26 15.02 A 55.9 A 15.1 A 27.0 73 923.2 37.1 45.26 15.02 62.05 49.55 16.40 33.14 117.65 6.613 2.313 12.925 3.718 1.000 0.783	Number	(10**4 /cmm)	(10**2 /cmm)	(%)		* 0	(cubic micron)	(pico gr	(%)	(Day)
957. 21. 47.0 15.8 67.7 49.1 16.5 33.6 73.6 73.6 73.6 73.6 73.6 73.6 73.6	33 33	80		40.	13.	. 2.	49.	16.	33.	1 (
51.0 16.3 32.0 73 1056. 29. 81.0 10.0 25.2 59.8 19.3 32.0 73 1056. 29. 50.0 17.0 59.6 47.3 16.1 34.0 73 924. 45. 41.5 13.8 62.9 46.7 16.6 33.3 73 1156. 39. 54.0 15.3 746.7 15.6 33.3 73 1126. 61. 52.5 16.9 64.9 46.6 15.0 32.2 73 1127. 47. 45.0 15.3 77.6 45.7 15.6 33.3 73 1128. 81.001. A 52. A 56.0 A 15.1 A 20.2 A 55.9 A 15.1 A 27.0 73 923.2 37.1 45.26 15.02 62.05 49.55 16.40 33.14 167.51 17.65 6.613 2.313 12.925 3.718 11.000 0.783	7 6	n 0	. 72	• 1	5.		9	ŷ.	33	$-\infty$
1056. 29. 31.0 10.0 25.2 59.8 19.3 32.3 73 1056. 29. 50.0 17.0 59.6 47.3 16.1 34.0 73 1056. 29. 50.0 17.0 59.6 47.3 16.1 34.0 73 1156. 41.5 13.8 62.8 44.1 14.6 33.3 73 1156. 39. 54.0 18.0 62.9 46.7 15.6 33.3 73 1120. 43. 54.0 17.7 76.6 48.1 15.8 32.2 73 1170. A 56.0 A 15.1 A 20.2 A 55.9 A 15.1 A 27.0 73 15.3 37.1 45.26 15.02 62.05 49.55 16.40 33.14 167.51 17.65 6.613 2.313 12.925 3.718 1.000 0.783) 	0 -	7 7 4 1	Ω.	4.	ς,	ä	9	2) (~
45. 50.0 17.0 59.6 47.3 16.1 34.0 73 942. 45. 40.0 17.0 62.8 44.1 14.6 33.3 73 924. 43. 46.0 15.3 74.3 49.8 16.6 33.3 73 1156. 61. 52.5 16.9 64.9 46.7 15.6 33.3 73 1120. 43. 54.0 15.3 77.6 45.7 15.5 34.0 77 1121. 43. 54.0 17.7 76.6 48.1 15.8 32.8 77 1076. 39. 51.0 16.6 69.4 47.4 15.8 32.5 77 1001. A 52. A 56.0 A 15.1 A 20.2 A 55.9 A 15.1 A 27.0 73 923.2 37.1 45.26 15.02 62.05 49.55 16.40 33.14 167.51 17.65 6.613 2.313 12.925 3.718 1.000 0.783	- α · ·	7 u	. 70		0	Ω	о О	9	2	\sim
924. 45. 41.5 13.8 62.8 44.1 14.6 33.3 73 1156. 33. 46.0 15.3 74.3 49.8 16.6 33.3 73 1156. 39. 54.0 18.0 62.9 46.7 15.6 33.3 73 1126. 61. 52.5 16.9 64.9 46.6 15.0 32.2 73 1122. 47. 45.0 15.3 77.6 45.7 15.8 32.8 73 1122. 43. 54.0 17.7 76.6 48.1 15.8 32.8 73 1076. 39. 51.0 16.6 69.4 47.4 15.4 32.5 73 1001. A 52. A 56.0 A 15.1 A 20.2 A 55.9 A 15.1 A 27.0 73 953.2 37.1 45.26 15.02 62.05 49.55 16.40 33.14 34 34 34 34 34 34 34 167.51 17.65 6.613 2.313 12.925 3.718 1.000 0.783	000	2 5	. 2.	·	_	6	7	9	4	\sim
1156. 39. 46.0 15.3 74.3 49.8 16.6 33.3 73 1156. 39. 54.0 18.0 62.9 46.7 15.6 33.3 73 1126. 61. 52.5 16.9 64.9 46.6 15.0 32.2 1127. 47. 45.0 15.3 77.6 48.1 15.8 32.8 73 11076. 39. 51.0 16.6 69.4 47.4 15.4 32.5 73 1001. A 52. A 56.0 A 15.1 A 20.2 A 55.9 A 15.1 A 27.0 73.0 923.2 37.1 45.26 15.02 62.05 49.55 16.40 33.14 167.51 17.65 6.613 2.313 12.925 3.718 1.000 0.783	n c	ず(40.	•	m m	2	4.	4.	۲,	· ~
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.D. 167.51 17.65 6.613 2.313 12.925 3.718 1.000 0.7	Mean	923.	37.1	5.2	5.	2.0	9.5	1 9	3.1	
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	o.D.	•	17.65	.61	2.313	2.92	3.718	•	0.7	

A : Excluded from statistical calculations because of aggregation

APPENDIX 6-1-M2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 10 ppm Male

			,																					
014	 1 1 1 1 1	(Day)	1 (m	733	\sim	\sim	3	(2)	3	\sim	~~	\sim	~) ~	734) (*) (7	, (735	~) (735
al No. 82	MCHC	(%)	٦.		34.6	3	4.	4	4.	34.1	ω.	2	. 7	2		•	· ~	, <	, ''	, M	•	_	• • ~	31.2
Experiment	MCH	(pico gram)	1.9	9	17.7	9		7	5.	16.5	7	9	9	9	9	9	16.3			9	9	٧		15.6
	MCV	(cubic micron)	0.	0	51.3	٠ و	9	0	46.5	&	-	0	52.2	on.	48.7	52.9	48,5	_	· -	48.7	• m	-	9	50.2
	Platelet Count	(10**4 /cmm)	0	2	71.0	H	8	-	51.1	Ω	65.8	2	54.4		7	60.1	8	S		63.1	3	2	62.1	6
	Hb Conc.	(g/dl)	13.7	14.1	14.7	14.8	14.0			15.5	9		4.	14.1	11.8	٠ ٣	7	4.	7	15.5		12.0	15.0	16.2
	Ht	(%)	41.5	'n	42.5	4.	i	٠ ص	و	٠.	œ	٠ ص	2	٠ س	٠			ω.	3	Ġ		ъ Ф	.0	2:
	WBC	(10**2 /cmm)	39.	25.	32.	23.	19.	25.		29.	25.	27.	19.	21.	29.	34.	28.	28.	35.	27.	31.	47.	39.	45.
	RBC	(LU**4 /cmm)	829.	ഗ	\sim	ى د	\sim	α/	⊃ '	4,	℧ ′	ダィ	9	∞	mr	_ ,	₹ (83	\circ	9 4	ಶ	4	96	m
	Animal	Number	102	0	\supset	$>$ \circ	\sim	٦ ,	٦,	٦,	⊣ -	⊣ -	- (7	\sim c	7 (7 (7	2	7	3	\sim	\sim	m

APPENDIX 6-1-M2-1 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 10 ppm Male

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MCH	pico gram)	1 9	7.	9	8	9	7	4.	9	20	LC CL	س		6.4	34	
MCV		1 &	ф ф	9	ς.	i	2	_;	2	σ.	ς.	ω	· &	10	4	
latelet Count	_	5.	4.	&	7.	ъ Ф	9	5	2	./	9.	4.		63.01	34	
			•	٠	•						14.6	14.8	16.0	14.67	34	2.032
Ht	(8)	0		٠ د	ف	2	2		0		9	9	49.0	44.46	34	5.620
WBC	(10**2 /cmm)											45.	44.	30.1	34	8.10
RBC Count	(10**4 /cmm)	1033.	843.	910.	6/1.	822.		541. 110.		_	2	ď.	1			132.64
Animal	Number			1 4 T			1 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	L 40	7 ,	4.	1.49	Ų,	ווף	Mean	Z	S.D.
	RBC WBC Ht Hb Platelet MCV MCH MCHC Count	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count (10**4 (10**2 (10**4 (cubic (pico //cmm) //cmm) micron) gram) (%) (%)	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2 (10**4 (cubic (pico / cmm) / cmm) / cmm) / cmm) (%) (g/dl) / cmm) (%) (%) (%)	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**2 (10**4 (10**2 / cmm) (%) (g/dl) / cmm) micron) gram) (%) (10*3. 38. 50.5 16.9 65.8 48.9 16.4 33.5 843. 27. 41.0 14.4 54.5 48.6 17.1 35.1	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (cubic Count / cmm) (%) (g/dl) / cmm) micron) gram) (%) (8) (1033. 38. 50.5 16.9 65.8 48.9 16.4 33.5 843. 27. 41.0 14.4 54.5 48.6 17.1 35.1 916. 25. 45.5 15.0 58.0 49.7 16.4 33.0	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) /cmm) (8) (9/d1) /cmm) (8) (8) (8) (9/d1) (9/d1) (10**4 (cubic (pico gram) (8) (8) (9/d1) (10**4 (cubic (pico gram) (8) (8) (10**4 (cubic (10**4 (10	RBC WBC Ht Hb Platelet MCV MCH MCHC (10**4 (cubic Count (10**4) (10**4 (cubic Count (10**4) (2 cunt (10**4) (2 cunt (10**4) (2 cubic (2 cubic (2 cubic (2 cubic (3 cu	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (cubic Golds)))))))) (g/dl) / (cmm) (g/dl) / (cmm) (g/dl) / (cmm) (g/dl) (g/dl) / (cmm) (g/dl) (g/d	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) (10**4 (cubic (pico (10**4 (cubic (10**4 (10**4 (cubic (10**4 (cubic (10**4 (cubic (10**4 (RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) (9/d1) /cmm) (%) (9/d1) /cmm) (%) (9/d1) /cmm) (%) (9/d1) (9/d1) /cmm) (%) (8) (8) (10.33.	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count (10**4 (10**2) (10**4 (cubic Count Count (10**4) (10**2) (10**4 (cubic Count (10**4) (10**2) (10**4 (cubic Count (10**4) (10**4) (10**4) (10**4) (10**4 (cubic Count (10**4) (RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (4/d1) (20**4 (cubic Count Count (10**4) (10**2) (4/d1) (5/mm) (5/mm) (6/mm) (7/mm) (7/mm) (7/mm) (8/mm) (RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2)	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) /cmm) (%) (9/d1) /cmm) micron) gram) (%) (6/d1) /cmm) micron) gram) (%) (6/d1) /cmm) micron) gram) (%) (6/d1) /cmm) micron) gram) (%) (%) (6/d1) /cmm) micron) gram) (%) (%) (%) (%) (%) (%) (%) (%) (%) (%	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (10**4) (10**2) (10**4 (10**4) (10**4	RBC WBC WH the Platelet MCV MCH MCHC Count (10**4 (10**2) (10**4 (2000) (10**4 (2000) (10**4 (2000) (2000) (10**4 (2000)

APPENDIX 6-1-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

1	t																						٩
	(Day)	\sim	\sim	3	3	3	α	\sim	\sim	\sim	3	\sim	3	\sim	734	\sim	\sim	m,	\sim	\sim	\sim	\sim	3
MCHC	(8)	33.6	5	9	4.	3	2.	س	2	4.	ς,	3,	3.	-	•	0	3,	ς,	e C	34.2	3,	3,	33.
MCH	(pico gram)	7.	9	4.	_	17.5	7	~	4.	9	9	7.	9	7	•	9	16.5	9	9	ģ	9	S	9
MCV	(cubic micron)	! .:		₹.		_;	2	÷	4	т С	0		6	m	52.7	m	ъ Ф	œ	ъ Ф	φ,	φ,	•	ω.
Platelet	(10**4 /cmm)	! ~			.0	\sim	ċ	φ.	· •	₩	6	,	ä	10	47.4	Ţ.	9	٠.	0	61.4	2		2
Hb	(g/dl)	13.1	13.7	7.4	14.1	14.4	9	4.	4	ر ر	L.		رى رى	~		0	•	7	7		13,6	17.8	A 15.0
 Ht	(%)	16		, . , æ	, ,-		, o	4	پ	4	, ,		ģ	C	35.5	4.	· ω	` ~		45.0	C	· ~	A 45.0
WBC	Count (10**2 /cmm)		, K	164	. 9	27.	34.	21.	• • ~ ~		. 00	27.	22.	27.	24.	28.	20°	24.	31.	22.	a c		· ·
RBC	Count (10**4 /cmm)	1 10	200 200 200 200 200 200 200 200 200 20	· ~	823	824.) 4	' L C) ~	۳	1 <	ナト	. ٣) LC	673.	4	œ	70	٠ ن	0	7) L	A 929.
	Anımal Number	, () C	\sim) C) C	>	- ا	4	-	-		-	_		-	4 ()	4 (1	1 (7 (227

A :Excluded from statistical calculations because of aggregation

APPENDIX 6-1-M3-1

-M3-1 CONTINUED

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

1		1																				,		5	4
		(Day)	C	3		3	\sim	\sim	3	\mathcal{C}	S	\sim	\sim	\sim	3	\sim	\sim	3	ŕ	736		m 1			`
	MCHC	(8)	3	2.	32.9	3	4	3.	4.	2.	2	2	2.	2.	2.	3,	ش	2	5.	4.	33.4	2.	33.09	4.1	1.370
	MCH	(pico gram)	ູ	υ.	17.1	9	9	Ŋ.	وَ	4.	9	9	ν.		9	ٷ	δ.	16.2	۲.	16.1	15,1	9	16.60	-1	1.622
	MCV	(cubic micron)	7.	7.	52.2	8	æ	5.	ω	÷	0	1.	7.	ъ 8	9.	7.	7	50.3	2	47.1	45.3	49.3	50.46		7.679
	Platelet Count	(TO" # 4. /cmm)	7.	0	67.5	9	<u>.</u>	9	3.	2	8	7.	9.	6	Э,	ė.	2	8	ä	7	61.8	7.	61.19	41	14.443
	Hb Conc.	(g/dl)		9	13.8		5		17.0	13.1	14.1			15.5	3.		4.	4.		14.0	19.2	٠ ش		41	2.108
	Ħŧ	(&)	4.	 	42.0	9.	4.	4.	6	0	Э.	•	2.	8	7	3.	3	4.	0.	41.0	57.5	0	43.95	41	5.730
	WBC	(TO ** 7 (Cmm)			21.						38.		5		44.			43.	69.	42.	52.		36.45	0	
	RBC	(TO**4 /cmm)	1 2	8	805.	-	90	9		91	4	1	0	6	4	0	0	7	\mathbf{H}	871.	1268.	2	8.688	41	166.58
	Animal	Number	1 ~	2	\sim	c	m	C	m	3	C	3	3	3	4	4	4	4	4	250	2	S	Mean	z	S.D.
	i		1																				i .		

E : Exceeded the upper bound of indicator.

APPENDIX 6-1-M4-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 1000 ppm Male

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MCHC	(.	2	2	3	ς.	2	ິຕ	ς,	4.	ς,	· ~	m	4	6	, ~) (c	• •	•		• ~	· .	•	, ,	. 1	
MCH	r a		છં	9	9	7	4.	9	9	9	9	9	9	9	، ي	 M	ر		• •	• • \c	• • \c		• • •	ດ ທ	• 1	
MCV	(cubic micron)	-	٠ و	Ή.	ъ 8	0	4.	ω	ъ 8	ω	ω	9	6	7.		9	4	6	, 0	11	. α	٠	1		0.74	
tel cun	* \(\frac{1}{2}\)	1	· .	œ	8	9.	9.	6	ъ.	3	59.7	81.3	• @	4.	0	·	١٥.		_			ς,		•	•	
Hb Cong.			T.C.	13.1	19.1			15.3	15.2	15.7	15.5	т. М	2	4.	15.6	16.1	15.0	15.1	11.4	13.3	14.2	17.0	0 9	18.7		
	(%)	1	• o c			2	о О	ė	5	·					·	٠ ش		7			•	·	_		. !	
WBC	(10**2 /cmm)		. 27	. 67	27.	23.	35.	25.	22.	26.	32.	44.	33.	23.	27.	26.	30.	37.	23.	27.	34.	37.	45.	33.		
RBC	(10**4 /cmm)	1 0	V 0	0 !	17	ന	യ	ಶ	∾.	4	ဖ	\sim	- 0	2	94	03	\sim	₹	m	_	10	11	09	20	-	
Animal	Number	1 0	> C	> C	\supset	\supset	\supset	\supset) r	٦,	٠ ا	⊢ r	٦,	٦,	⊣ (7	7	2	2	3	\sim	\sim	\sim	3		
	RBC WBC Ht Hb Platelet MCV MCH MCH Count	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count Count (10**4 (10**2 (10**4 (cubic (pico (p	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count Count (10**2 (10**4 (cubic (pico / cmm) / cmm) (8) (9/dl) / cmm) (7cmm) (8) (9/dl) (Da	RBC WBC Ht Hb Platelet MCV MCH MCHCC Count (10**4 (10**2 (10**4 (cubic (pico / cmm) / cmm) (8) (9/dl) / cmm) (73 32.8 73	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count (10**4 (10**2 (10**4 (cubic (pico / cmm) / cmm) / cmm) (%) (g/dl) / cmm) micron) gram) (%) (Dage	RBC WBC Ht Hb Platelet MCV MCH MCHCC Count (10**4 (10**2 (10**4 (cubic (pico / cmm) / cmm) (%) (g/dl) / cmm) (g/dl) / cmm) (g/dl) (g/dl) / cmm) (%) (base 15.1 53.9 49.6 16.8 32.3 73 73 1176. 27. 57.0 19.1 48.8 48.5 16.2 33.5 73	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2 (10**4 (cubic (pico / cmm) / cmm) / cmm) (%) (g/dl) / cmm) micron) gram) (%) (Da 928 22. 46.0 15.1 53.9 49.6 16.3 32.3 73 73 1176. 27. 57.0 19.1 48.8 48.5 16.2 33.9 73 835.	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) (20mt) (10**4 (cubic (pico (22. 46.0 15.1 58.1 51.9 16.3 32.8 73 73 11.76. 27. 57.0 19.1 48.8 48.5 16.2 33.5 73 868. 35. 39.0 12.8 89.8 44.9 14.7 32.8	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (cubic (pico (pico (g/d1) /cmm) /cmm) (g/d1) /cmm) (g/d1)	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (cubic Count (10**4 (10**2) (g/dl) /cmm) (%) (g/dl) /cmm) (%) (g/dl) /cmm) (%) (g/dl) /cmm) (%) (pico gram) (%) (Da 928 22. 46.0 15.1 53.9 49.6 16.8 32.3 73 73 1176 27. 57.0 19.1 48.8 48.5 16.2 33.5 73 85. 23. 42.5 14.4 59.7 50.9 17.2 33.9 73 868 35. 39.0 12.8 89.8 44.9 14.7 32.8 73 940. 25. 46.0 15.2 55.3 48.0 16.2 33.8 73	RBC wbc Ht Hb Platelet MCV MCH MCHC Count Count (10**4 (10	RBC WBC Ht Hb Platelet MCV MCH MCHC Count Count (10**4 (10**2) (9/d1) (10**4 (cubic (pico (2000)) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (2000) (3) (3) (2000) (3) (3) (3) (3) (3) (3) (3) (3) (3) (3	RBC wBC Ht hb Platelet MCV MCH MCHC Count (10**4 (10**2) (4/d1) (5**4 (cubic Count Count (10**4) (10**2) (4/d1) (5**4 (cubic Count Count (10**4) (10**2) (4/d1) (5**4 (cubic Count Gord) (4/d1) (5**4 (cubic Gord) (5**) (5**) (5**4 (cubic Gord) (5**) (5**) (5**4 (cubic Gord) (5**) (5**) (5***4 (cubic Gord) (5**) (5**) (5***4 (cubic Gord) (5**) (5**) (5***4 (cubic Gord) (5**) (5**) (5***4 (cubic Gord) (5**)	RBC Count Count (10**4 (Cubic Count (10**4 (10**4 (Cubic Count (10**4 (10**4 (Cubic Count (10**4 (10**4 (10**4)))))))))))))))) 928. 22. 46.0 15.1 53.9 49.6 16.3 32.8 73 73 73 73 73 73 73 73 73 73 73 73 73	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) (0**4 (cubic (pico form)) (%) (9/d1) (0**4 (cubic (pico form)) (%) (9/d1) (0**4 (cubic form)) (%) (9/d1) (0**4 (cubic form)) (%) (9/d1) (0**4 (cubic form)) (%) (%) (9/d1) (0**4 (cubic form)) (%) (%) (%) (%) (%) (%) (%) (%) (%) (RBC Count Count (10**4 (10**2) (10**4 (10**2) (10**4 (10**2) (10**4 (10**2) (10**4 (10**2) (10**4 (10**4 (10**2) (10**4 (10**4 (10**2) (10**4 (10**4 (10**2) (10**4 (10**4 (10**2) (10**4 (10**2) (10**4 (10**4 (10**4 (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4) (10**4) (10**4) (10**4 (10**4) (10*	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (cubic Count (10**2) (g/dl) /cmm) (%) (g/dl) /cmm) (%) (g/dl) (g/dl) /cmm) (%) (g/dl) (g/dl) (pico Gunt (RBC Count (10**4 (cubic Count (10)**4	RBC WBC Ht Hb Platelet MCV MCH MCH (10**4 (count Count Count Count Count (%) (g/dl) (g/dl) (count Count Count (lo**4 (cubic Count (lo**4 (lo**4 (lo**2) (g/dl) (g/d	RBC Count Count (%) (%) (g/d1) (10**4 (cubic Count Count Count (%) (g/d1) (micron) (RBC WBC Count Count (10**4 (cubic Cubic Count (10**4 (cubic Cubic	RBC WBC Ht Hb Platelet MCV MCH MCHC (10**4 (cubic Count (10**4 (cubic Cubic Count (10**4 (cubic Cubic	RBC WBC Ht Hb Platelet MCV MCH MCHC Count (10**4 (10**2) (9/d1) (9/d1) / Cmm) (8) (9/d1) / Cmm) (8) (9/d1) (10**4 (cubic Count Count (10**4) (10**2) (9/d1) / Cmm) (8) (9/d1) (15.1 (10.5) (10.	RBC WBC Ht Count (10**4 (10**4 (10**4) (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (10**4) (10**4 (10**4) (RBC WBC WBC Ht Conc. Count (10**4 (cubic (pico (10**4) (4)) (4)) (4)) (4) (4) (10**4 (cubic (pico (10**4) (4)) (4)) (4)) (4)) (4) (6) (6) (6) (7) (7) (10**4 (cubic (pico (10**4) (4)) (4)) (4)) (4)) (4) (6) (7) (7) (7) (7) (7) (7) (7) (7) (7) (7	PBC WBC Ht Hb Platelet MCV MCH MCHC (10**4) (1

CONTINUED	
6 - 1 - M4 - 1	
APPENDIX	

4

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

•		(Day)	1 0	735	α	\sim	\sim	\sim	\sim	\sim	3	\sim	\sim			
	MCHC	(8)	34.4	33.1	34.2	4.	2	0	3	ω,	3		32.3	33.21	33	1.004
4	MCH	gram)	6 .	15.7	9	9	5.	9	9	9	5.	δ.	5.	16.15	33	0.541
	MCV	micron)	48.4	47.4	47.7	48.7	48.4	54.2	48.7	48.6	47.3	48.4	48.3	48.66	33	1,918
	Platelet Count	(1	75.6	64.6	4.	3	0	₫.	9	٠.	· 9	6.99	Ω		33	9.363
	Hb Conc.	(g/dl)	5.	18.7	•	٠ ك	m	0	4.	5.	4.	4.	3.	15.00		1.833
	Ht	(%)	4.	56.5	5.	5.	2	ж •	4.		4.	46.0	•	45.17	33	5.412
	WBC Count (10**2	/cmm)	40.	44.	35.	36.	27.		22.			53.	43.	32.21		9.033
	RBC Count (10**4	/cmm)	\vdash	1192.	4	2	9		0	9	3	2	6	931.0		126.27
	Animal	Number	3	338	4	4	4	4	4	4	4		351	Mean	Z	s.D.

E : Exceeded the upper bound of indicator.

APPENDIX 6-1-F1-1

*

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 0 ppm Female

No. 82014	MCHC		(%) (Day)	3.9 74	6.0 74	1.6 7	4	5.0 74	3.3 74	4.2 7	4.3 74	4.4 74	5.0 74	2.7 74	1.2 74	3.5 74	3.2 74	3.8 74	.4 74	5.1 7	74.5	4.0 74	3.5 74	3.0 7	4.5 74
Experimental	MCH	(pico	gram)		2.	9		9	7.	7	7	8	ω	7	.'	9		۲.	16.7	7	7	œ	7		17.7
	MCV	(cubic	micron)	2.	•	3.	9	&	-	0	-	3.	2.	3.	9	0	2.	0	48.6	8	6	5	2	4.	51.4
	tel	Count (10**4	/cmm/	5.	9	2	67.0	9	7	0	9	9	41.3	5	•	5	5	٠		•	6	ထ		9	50.2
	Hb	Conc.	(g/dl)	14.9	•	•	15.1	2	15.0	4	4.	ж	14.0	5.	•	4.	12.3	•	•	15.1	14.5	•	11.9	14.2	14.5
	Ht		(%) (w	4.	3	9	43.0	9	5.	٠ ٦	2	9	0	9	3.	3.	7.	0	41.0	3	2	2	5	3.	42.0
		Count (10**2	m) /cm		28.		37.		44.				21.				72.		26.						28.
		1 Count (10**4	er /cmm	1 4	7	\sim	7	4	8	-		2	S	9	9	S	0	9	843.	α	S	9	8	8	817.
1	•	Animal	Numbe	000	00	00	00	00	01	01	\Box)	$\frac{1}{2}$)2)2	0.2	02	02	1025	02	02	03	03	03	0

A :Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F1-1 CONTINUED

4 A

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 0 ppm Female

		(Day) 	742	742	742	743	743	743	743	743	743		
No. 82014	мснс	(%)	30.8	31.3	34.1	33.7	•	4.	33.8	5.	. 1	33.60	1.813
Experimental No.		gram)	20.1	23.6	17.7	17.7	17.5	17,3	17.4	17.4 A	20.4	17.73	1.693
щ		micron)	65.1	5.	-	52.5	ä	0	ij	49.0 A	7.	52.85	5.520
	Platelet Count (10**4 (/ cmm)	32.5	30.1	49.7	52.5	52.2	50.3	64.8	A 8.9 A	• 1	53.74	15.264
		(g/dl)	9.1	8.6	•	15.0	14.9	14.1	14.7	A 16.0 N	•	13.49	2.194
	Ht	(8)	29.5	27.5	44.0	44.5	44.0	41.0	43.5	A 45.0	36.0	39.96	5.460
	WBC Count (10**2	/cmm)	68.	103.	21.	21.	27.	17.	34.	A 22.	35.	33.1	19.04
	RBC Count (10**4	/cmm)	453.	364.	848.	847.	S	-	847.	A 918.	624.	766.5	135.38
	Animal	Number 	1035	1038	1039	1040	1042	1046	1047	1048	1052	Mean	S.D.

A :Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F2-1

4 4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 10 ppm Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day)	740 740 740 740 740 740 740 741 741 741 741 742 742
MCHC (&)	A A S S S S S S S S S S S S S S S S S S
MCH (pico gram)	A 16.8 16.8 16.8 17.5 17.0 17.5 17.2 17.2 17.2 17.4 17.6
MCV (cubic micron)	A 4 51 51 51 51 51 51 51 51 51 51 51 51 51
Platelet Count (10**4	A 4 60 60 60 60 60 60 60 60 60 60 60 60 60
Hb Conc. (g/dl)	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Ht (%)	A 4 44444444444444444444444444444444444
WBC Count (10**2	A A 227. 227. 227. 227. 227. 227. 227. 2
RBC Count (10**4	A 857. B 812. B 827. B 827.
Animal Number	11101 11102 11103 11103 11111 11113 11128 11128 11128 1132

A Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F2-1 CONTINUED

4. 4.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Female
wad
10
Sex
and
Level

	! ! ! !	(Day)	742	742	742	743	743	743	743	743	743	743		
1 No. 82014	MCHC	(%)	33.3	•	4.	33.0	33.	2	4.	ω.	٠ ٣	34.1	33.66	
Experimental	MCH	(pico gram)	18.2	8	•		7	7.	7		9		17.53	29
	MCV	(cubic micron)	54.6	56.3	•		0.	•					52.14	2.698
	Platelet Count		59.1	40.9	•	52.0	. 7	•	•	50.4			47.88	9.090
	Hb Conc.	_	15.5	13.3	•	T 4	•	13.6	•	13.9	•	14.0	13.86	
	Ht	(%)		40.0	•	44.	•	•		41.0	٠	41.0	41.17	2.623
! ! ! ! !	WBC Count	(10**2 /cmm)	22.	12.	7. T.	7 -	A 13.	. T. C.				22.	27.8	15.85
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RBC Count	(10**4 /cmm)	851.	, LT.	, K 7 0	. TOO K	† c	. 200		717.	• T 00	D 1	792.6	
	Animal	Number	\sim	٦,	7 7 7 7	# V	r	r	4 - -	# ~	٦,	n 1	Mean N	S.D.
1		1										i		1

A : Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F3-1

16 4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 100 ppm Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day)	740 740 740 740 740 740 741 741 742 742 742
MCHC (%)	A A A A A A A A A A A A A A A A A A A
MCH (pico gram)	117.1 117.1 117.1 117.1 117.1 117.3 117.3 117.3 117.3 117.3 117.3 117.3
MCV (cubic micron)	A 52.22
Platelet Count (10**4	A 552.77
Hb Conc. (g/dl)	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Ht (%)	A 4 4 4 4 1
WBC Count (10**2	A 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
RBC Count (10**4 /cmm)	850. 778. 830. 779. 849. 812. 746. 793. 823. 797. 826. 778. 831.
Animal Number	1203 1203 1203 1203 1208 1210 1210 1222 1222 1223 1233 1233 1233

A : Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F3-1 CONTINUED

4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 100 ppm Female

	1		! !								1		
14	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Day)	7.43	747	742	743	743	743	743	743			
Experimental No. 82014	MCHC	(8)	31 1		34.4	32.4	A 31.0	33.4	34.5	34.4	33 63	•	28
Experiment	MCH	(pico gram)	18.0	• •	17.6	17.6	A 19.8	17.6	17.4	17.3	17.51	i .	0.748
	MCV	(cubic micron)	57.3	52.4	51.3		A 63.8	25.8	50.5	50.2	52.09	38	3.188
	Platelet Count	(10**4 /cmm)	49.7	51.1	58.1			500 500 500 500 500 500 500 500 500 500	•	5T.9	48.65	28	8.579
	Hb Conc.	(g/dl)	13.5	13.9	L5,3	14.4 7	7 T T	* u	·	14.8	14.09	28	0.875
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ht	(%)	43.0	41.5	44 44. 54.0		44	44.5	_	- ;	41.89	28	2.351
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	WBC	(10**2 /cmm) 	21.	18. 18.	31.	A 24.		18		• 0 7	28.0	28	9.65
	RBC Count	(LU*4 /cmm)	750.	192.	820.	A 572.	833,	862.	856.		807.3	28	65.97
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Animal	Number	1240	1245	1246	1247	1 2 48	1251	1252		Mean	Z	S.D.

A : Excluded from statistical calculations because of aggregation

APPENDIX 6-1-F4-1

Z)

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 1000 ppm Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day)	
MCHC (%)	A 3 3 4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
MCH (pico gram)	A 17.1 16.9 17.1 17.0 17.0 17.2 17.2 16.8 17.2 16.8 17.2 17.6
MCV (cubic micron)	4 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6
Platelet Count (10**4	A 602 602 602 602 603 603 603 603 603 603 603 603
Hb Conc. (g/dl)	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Ht (%)	A 4 4 4 2
WBC Count (10**2 /cmm)	A 32 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
RBC Count (10**4 /cmm)	844. 827. 827. 830. 833. 833. 816. 536. 749. 749. 732. 732. 884.
Animal Number	1301 1303 1304 1304 1304 1310 1314 1321 1322 1323 1323 1336 1336

A : Excluded from statistical calculations because of aggregation

6 - 1 - F4 - 1	
IX	
APPEND	

CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Female 1000 ppm Level and Sex:

	Experimental No. 82014
Week)	
le (104 Wee]	
Schedu.	
d on	
s Killed or	
Animals Killed	

	1						!		
(Dav)	144	742	44	44	444	44	4		
MCHC (%)	1 20 6	33.3	25.	ж Н	3.	3.4	m !		31 0.951
	A	A		A			!		
MCH (pico aram)	1.7	17.5	. ·	9	99	7.	7.		31 0.924
	A	Ą		A			1		
MCV (cubic micron)	1	52.6	. 2	64	00	0	0	51.81	31 3.428
Š	A	A		A			!		
<pre>latelet Count (10**4 /cmm)</pre>	1 - 0	58.5	5.0	26	90	3.	-: !		31 9.143
P1 (A	A		A			!		
Hb Conc. q/dl)	4.	15.0	44.	4.2	4.4.	4.	4.	14.00	31 1.203
	A	A		A			1 1		
Ht (%)	40.5	45.0		т o	4.2	д. 8	3.	41.90	31 3.303
	- A	A		A			; ! !		
WBC Count (10**2	A 36.	22. A 32.	34.	A 29. 82.	21.	28. 17.	25.	30.2	31 14.40
	1	7		7			1		
RBC Count (10**4 /cmm)	836. 867.	856. 693.	\sim	20	7	24	6 1	813.8	31 95.91
-	A	A		A			; !		
Animal Number	imm	1340 1341	34	34 34	34	1350 1351	35	Mean	S.D.
	! !						1		

A : Excluded from statistical calculations because of aggregation

APPENDIX 6-2-M1-1

 $\mathcal{I}_{\mathcal{I}}$

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 0 ppm

Male

Animals Killed in Extremis

		Day)	\sim	$^{\circ}$	\circ	_	35	\sim	~	_	\sim	വ	ထ	0	\sim		, <	1. I
82014		(D)	7	9	9	7	7	7	· ب	9	9	3	9	7	7	7	۰ ۳	7
No.	MCHC	(8)		٠.	~;	· m	30.6	32.	• m	7	÷	δ.	9	2	7	ď	· ` <	*
Experimental	MCH (pico	gram)				•	16.5		Ġ	ė	_	9	٠ د	4	. 4	ע		•
2	MCV (cubic	micron)	•	٠		•	54.0	~		φ.	œ.	~	4	,	. 4	• • u	o	•
מדוופת זון הערד פווודי	Platelet Count (10**4	/cmm)	73.3	т т	,	4.	27.8	ω,	9	m		_	_	• • —	; r	٠,	۰۰	0
Antimats Att	Hb Conc.	(g/dl)	12.6		14.8		8.1		5.4		ω,	•	, IC	•) (7.77		L4.5	7
	Ht	(&)	1 6	4			26.5	_	19.	. α	 	0.00	•		ر. ار د	• -	41.0	49.0
	WBC Count (10**2	/cmm)	29.	641	160.	86,	>85	, •	21.			• rc	1 п	.000	Y) (. 77	33.	34.
	RBC Count	(www/	740.	468	869	416.	49]	771		. 070		. 47. 0.05		717.	824.	.069	906	1007.
	Animal	Number	7	- α	0 -	3 F	- I	27	2.0	7 C	# C	7 0	67	3.4	43	49		52
	i		1															

C :Not measured because of clotting , E :Exceeded the upper bound of indicator.

APPENDIX 6-2-M2-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 10 ppm Male

Animals Killed in Extremis

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	; ; ; ; ;			; ; ; ; ; ;	Experimental	No.	82014
Anima1	RBC Count	WBC	Ht	Hb	Platelet	MCV	МСН	МСНС	
	(10**4	(10**2		•	(10**4	(cubic	(pico		
Number	/cmm)	/cmm)	(&)	(g/dl)	/cmm)	micron)	gram)	(8)	(Day)
101	449.	.09	27.0	8.7	9	60.1	19.4	2.	1 ~
105	4	.25.	0	:14.3	59.5	48.0	•	5	യ
109	S	74.	36.3	4.0	•	65.3	7	<u>-</u>	\sim
_	9	52.	1.	9.5	112.9	44.4	3	0	\sim
_	4	75.	31.0	10.1	ъ В	•	15.8	2.	(7)
115	208.	. 66	18.0	5.8	13.1	86.5	27.9		711
-	0	48.	31.5	•	7.		9	-	
\vdash	2	50.	0	14.4	51.8		9	2.	6
2	9	28.	38.0	13.1	0		9	4	. ~
2	\vdash	35.	6.	12.0	5		9	ς,	₹.
2	2	42.	40.0	12.8	٠		7	2	~
\sim	4	E >850.	33.5	0	4		6	-	_
135	829.	499.	43.0	13.1	36.4		15.8	0	l
\sim	2	E >850.	38.0	-	2		0	0	· C
150	120.	.06	7.0	3.0	44.8	58.3	•	42.9	

E : Exceeded the upper bound of indicator.

APPENDIX 6-2-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex: 100 ppm Male

014	(Day)	631 463 694 671 540
al No. 82	MCHC	28.6 24.0 21.9 26.2 32.5
Experimental No. 82014	MCH (pico gram)	17.9 14.4 20.6 15.0 15.9
nis	MCV (cubic micron)	62.6 60.1 94.0 57.3 48.8
imals Killed in Extremis	Platelet Count (10**4	56.9 27.4 20.7 79.7 68.4
Animals Kill	Hb Conc. (g/dl)	8.0 4.2 4.1 3.4
ł	Ht (8)	28.0 17.5 18.7 13.0 36.0
	WBC Count (10**2	64. 32. 493. 22. 87.
	RBC Count (10**4	447. 291. 199. 227.
	Animal	204 223 244 245 247

6-2-M4-1APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Male 1000 ppm Level and Sex:

Animals Killed in Extremis

									1 1 1
	RBC	İ	Ht	qH T	Platelet	MCV	MCH	MCHC	
Animal	Count (10**4	Count (10**2		Conc.	(10**4	(cubic	(pico		
Number	/cmm)		(%)	(g/dl)	/cmm)	micron)	gram)	(&)	(Day)
307	563.	压 >850.	49.0	9.6	44.6	87.0	17.1	19.6	069
309	742.		35.3	11.4	46.6		15.4	o.	574
311	404	662.	8	8.4			0		2
312	1052.	131.		16.2			ك	·	S
3 1 5	747	38.	9	C 4.0	c 1.1	C 64.8			$\overline{}$
321			35.	,	0.09		9		$\overline{}$
322	305	で 10 10 10 10 10 10 10 10 10 10					0	~	α
325	1016		48.5	16.1	78.1	47.7	15.8	33.2	687
י אר ר חיר ר	. 0 . 0	· 0	•	9 7			2	0	ď.
323			, 4	7, [[19.4	45.	δ.	4.	$\overline{}$
676	• dr. c		•		,	32,	2.	4	629
332	120.	. 707	•		20,00			4	712
339	319.	44.9		7.02			٠,	. ~	C
349	881.	701.	43.5	15.0	23.0	49.4	•	4	7

C :Not measured because of clotting,

Exceeded the upper bound of indicator.

APPENDIX 6-2-F1-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 0 ppm

Female

Animals Killed in Extremis

Experimental No. 82014 MCHC MCH (pico MCV (cubic Platelet Count (10**4 Hb Conc. Ht Count RBC Count (10**4 Animal

(Day)	\neg	σ.	~	σ	651	4	マ	С	n		$\boldsymbol{\sigma}$	\circ	y (<u>ر</u>		·u	, ,	,,,,	()	
(8)	4.	4.	6.	4.	33.0	3	4	•	ъ.	4.	4	٢	•	÷	ä	C	, ,	ກໍ	7	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
gram)	7.	٠ و	17.	17.	16.9	9	_	•		6	7		ν. •	,	9	۲	· (۷.	ä	
micron)	2	7	ന	8.0	51.2	C		j	0	4	6	, ,	÷	Э.	0		7.70		65,1	
/cmm)	75.4			67.2	1.9	6	7 7 7	• r	φ.	ι Ω	56.1	•		_'		1	·,	۲.	4	, 1
(g/dl)	13.9	13.6			ינ	- L	•	٠			14.6		4.5	6.7	7	- r	٠	•	0.9	. !
(&)	0	, 0	•	* 4	1 (c	• •	• .	°	س		ο α ο α	•	12.0	C		. 7 7		15,5	α	•
(wwo /	27.			٦ ٣	. 02				45.		• 1 K	14	压 >850。	9	• • • • • • • • • • • • • • • • • • • •	ת	c . 29.	6	0	n 1
(wwo/	778		4 0	ο α	. 808	. 000	> (\sim	\sim	7	T U	\neg	\sim		• co	0	C 919.	0	1 0	0
Number	1004	1005	5007	1007	, DOT	10 L 4	CTOT	T02/	1028	1022	1000	T036	1037	10.42	7 7 7	T045	1049	1050) L	
	1																			

E : Exceeded the upper bound of indicator. C : Not measured because of clotting ,

APPENDIX 6-2-F2-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Female	
10 ppm	
Sex:	
Level and	

Animals Killed in Extremis

				444	5		Experimental	al No. 8201	1.4
	RBC	WBC	Ht	qH	Platelet	MCV	MCH	СНС	
Animal	Count	Count		Conc.	Count (10**4	(cubic	(pico		
Number	(cmm)	(cmm)	(%)	(g/dl)	/cmm)	micron)	gram)	(&)	(Day)
10	708.	15.	36.5	12.9	6.	-		5.	2
_			3	•	•	Э,	7.	3.	S
-	0		2	7	•	ش	ъ 8	ij	9
10	٠ (r				•	6	7	ä	\mathbf{S}
7 (545	•	29.5	9.2	7	4.	9	4	ω
5	, A		'n		9	9	Ţ.	0	7
5	v		4		ک	3	7	9.	\sim
1127	888	28.	7		•	2	7	3.	\sim
1 5	9		. 2	2.		3	8	ς,	\mathcal{L}_{i}
, ר ל	200	3.2	2 (9	17.	96	7.	8	α
7 ~	10	五 >850。	· ω	9.2		7	7.	9	$\overline{}$
ן ר	0	12	2		9	Ω.	2	5	ω
ן ה	434.	五 >850。			H	H		2.	7
7	٦ (۲	>85	2 .	6.4		9	9	9.	9
7 7) -	ν α /	Ċ	•	9	9	ъ 8	2.	7
<u> </u>	859.	`	42.0	•	9	48.9	16.8	34.3	631
1152	895.		4.	15.4	•	9	7.	4.	7

C : Not measured because of clotting ,

E:Exceeded the upper bound of indicator.

APPENDIX 6-2-F3-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 100 ppm Female

Animals Killed in Extremis

Experimental No. 82014

(Day)	657 666 617 728 728 720 720 725 725)
MCHC (%)	33 23 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	٦.
MCH (pico gram)	28.1 12.3 17.7 16.8 16.8 12.3	7
MCV (cubic micron)	87.5 70.1 51.3 49.9 49.1 80.6 89.2 47.6 51.1 53.0	2
Platelet Count (10**4	18.4 14.6 58.0 65.0 17.8 77.2 75.0 6.8 93.6	Э.
Hb Conc. (g/dl)	114.9 13.5 13.6 10.3 10.5 16.6	ij
Ht (%)	14.0 11.0 28.5 443.0 442.0 12.5 119.0 41.5 50.0	
WBC Count (10**2		88
RBC Count (10**4	160. 157. 497. 838. 842. 815. 334. 155. 213. 756. 812. 980.	674.
Animal	1202 1202 1203 1212 1213 1223 1223 1225 1225 1227 1235	24

E :Exceeded the upper bound of indicator.

APPENDIX 6-2-F4-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Hematological Data

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

			•			1	Experimental No.	al No. 82014	14
	RBC	WBC	Ht	Hb	Platelet	MCV	MCH		
Anımaı	Count (10**4	(10**2		conc.	(10**4	(cubic	(pico		
шn	/cmm)	/cmm)	(&)	(g/dl)	/cmm)	micron)	gram)	(%)	(Day)
1305	457.	841.	31.0	8.6		67.8	-	31.6	069
1308	462.	58.	8	9.6	48.8		0	33.7	722
1309	367.	E >850.	19.5	7.1	٠		19.3	36.4	732
1311	677.	7	9	11.3	٠		9	9	671
1312	271.	25.	ъ.	3.1	2.0	5.	ij		652
1318	304.	110.	21.5	5.5	•	0	ω	5.	632
1319	175.	446.	9	2,3	•	4.	т •	ъ С	735
1325	598.	65.	36.0	10.0		60.2	16.7	27.8	683
1328	804.	42.	40.0	13.1	81.0	9	9	2.	736
1333	309.		18.0	5.0	8	&	9	7.	\sim
1335	836.		38.0	13.0	7	•	ა.	•	7
1337	848.	12.	9	14.7	3	•	7	•	694
1344	318.	521.		8.8	5.	9.	7.	0	

E :Exceeded the upper bound of indicator.

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41 42 63 51

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55 55 55 46 55

23 28 28 30

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(MALE) РРМ 0 LEVEL AND SEX

(104 WEEKS) ANIMALS KILLED ON SCHEDULE EXPERIMENTAL NO. 82014

1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			IAL LEUCOCY	ШS	(NUMBER OF C	CELLS PER HI	α		
AN IMAL NUMBER	EUTRO NT.	PHILS STAB.	EOSINO- PHILS	BASO- PHILS	LYMPHO- CYTES	PLASMO- CYTES	MONOCYTES	OTHERS	(DAY)
	67		2	0		0	0	0	IM
~	36	9	0	0	58	0	0	0	733
М	8 7	₽	2	0		0	0	0	M
7	33	↩	М	0		0	0	0	3
ſΛ	33	7	M	0		0	0	0	3
9	39	8	\leftarrow 1	0		0	0	0	М
0	35	īΣ	8	0		0	0	0	М
	24	7	0	0		0	0	0	М
	77	0	⊣	0		0	0	0	M
	37	9	~ 1	0		0	0	0	M
	29	2	Ŋ	0		0	0	0	M
	80	₽	₽	0		0	0	0	M
	20	₽	←	0		0	0	0	M
19	40	2	23	0		0	0	0	М
	61	2	~	0		0	0	0	М

1 1 1

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

CONITNOED	TOXICOLOGICAL STUDY	
7-1M1-5 XI	INHALATION TOXIC	IN F344 RATS
APPENDI	CARCINOGENIC	OF METHANOL
	AND	
	CHRONIC AND	

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INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 0 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

1 1 1 1 1 1 1 1		1 1 1 1 1							
5 F		DIFFEREN	. LEUCOC	YTES COUNT	(NUMBER OF	CELLS PER HI	UNDREDO		
ANIMAL	NEUTRO SEGMENT.	OPHILS STAB.	EOSINO- PHILS	<u>Б</u>	LYMPHO- CYTES	PLASMO- CYTES	0 N O	OTHERS	(DAY)
		0				0	0	0	M
		0	M	0		0	0	0	M
		7 7	A 1	O A		A 0	A 0	0 V	3
			₽	0	М	0	0	0	735
		2	2	0		0	0	0	М
		м	2	0		0	0	0	\sim
		0	2	0		0	0	0	М
		←	0	0		0	0	0	3
		←	2	0		0	0	0	М
		⊣	7	0		0	0	0	Μ
		0	←	0		0	0	0	М
		0	2	0		0	0	0	М
		0	0	0		0	0	0	\sim
		7	←	0		0	0	0	М
		A 2	N M	O 4		O A	O 4	O A	M
51	9	2		0	3.5		0	0	M
l m	6.				10				
	12.34	1.96	1.27	0.0	11.90	0.0	0.0	0.0	
Z	34	34	34	34	34	-	•	. 34	

APPENDIX 6-1-M2-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(MALE)	
РРЖ	
10	
••	
SEX	
AND	
LEVEL	

014	1 1 1 1 1 1 1 1 1	(DAY)	1 1	O 1	0 N	りょ	727) K) K) M) K) K) K) K) K) K) N) M	7 6	1 0	1 0	2	M
NTAL NO. 820	 	0 T H E R S		> <	> C) C) C	0	. С	· C) C) C) C) C) C) C	· C	o c	o c	> <	> 0	> (0
RIME	DRE	MONOCYTES		o c	o c	o c	0	0	0	0	C	0	С) C	0	0	C) C) C	o c	o c	> 0	O
	ELLS PER HU	PLASMO- CYTES.) C	o C) C	0	0	0	0	0	0	0	0	0	0	0	, С) C) C	o c	> 0	
: : : : : : : : :	NUMBER OF C	YMPH	35) L) K	6.7	2.7	4.2	54	53	36	26	52	54	54	40	45	61	56	2.7) t	27	- 14	
	TES COUNT (ВА	! ! ! ! ! ! !	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0	0	0	0	C	o c	
	DIFFERENTIAL LEUCOCY	EOSINO- PHILS	2	7	М	0	8	←	2	⊣	М	⊣	2	2	0	2	~ 3	2	7	M	~	ı C	; ! ! ! ! ! !
		PHILS STAB.	 - -	0	2	\leftarrow I	ᠳ	0	0	←	←	7	4	⊣	←1	N	М	2	0	.Μ	М	۲	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
		NEUTROI SEGMENT.	N	43	53	52	54	45	45	62	0 7	07	39	43	29	48	34	07	53	43	48	99	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	ANIMAL	I MB	10	0	0	0	107	0	\leftarrow	\leftarrow	↽	←1	↤	\sim	\sim	\sim	\sim	\sim	\sim	2	M	M	1

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6-1-M2-2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 10 PPM (MALE)

OUNT (NUMBER OF CELLS PER HUNDRED) SO- LYMPHO- PLASMO- MONOCYTES OTHERS CYTES CYTES (DAY) O 441	
D- LYMPHO- PLASMO- MONOCYTES OTHERS CYTES CYTES (DA 41 0 0 0 0 0 44 0 0 0 0 0 53 62 0 0 0 0 64 0 0 0 0 65 0 0 0 0 73 64 0 0 65 0 0 0 74 0 0 0 75 0 0 76 0 0 77 0 0 78 0 0	DIFFERENTIAL LEUCOC
41 0 0 0 0 0 73 73 74 75 75 75 75 75 75 75 75 75 75 75 75 75	NEUTROPHILS EOSINO- EGMENT. STAB. PHILS
63 46 65 65 67 64 64 64 60 60 60 60 60 60 60 60 60 60	6 2
46 0 0 0 73 65 0 0 0 73 64 0 0 0 73 40 0 0 73 40 0 0 73 62 0 0 73 62 0 0 0 62 0 0 0 73 0 0 0 73 0 0 0 73 0 0 0 74 0 0 0 75 0 0 0 75 0 0 0 75 0 0 0 75 0 0 0 76 0 0 0 76 0 0 0 77 0 0 0 78 0 0 0 76 0 0 0 77 0 0 0 84 34 </td <td>33 3 1</td>	33 3 1
65 0 0 0 73 65 65 64 0 0 0 0 0 73 64 64 0 0 0 0 0 0 73 65 65 65 65 65 65 65 65 65 65 65 65 65	2
62 0 0 0 73 64 0 0 0 73 64 0 0 0 0 0 73 64 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2
64 0 0 0 0 73 46 0 0 0 0 0 73 46 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2
40 0 0 0 73 46 0 0 0 0 73 62 0 0 0 0 73 53 0 0 0 0 73 58 0 0 0 0 73 58 0 0 0 0 0 73 59 0 0 0 0 0 73 73 73 73 73 73 73 74 34 34	7
46 0 0 0 73 62 0 0 0 73 53 0 0 0 73 42 0 0 0 73 58 0 0 0 73 59 0 0 0 73 59 0 0 0 0 49.6 0.0 0.0 0.0 0.0 9.37 0.0 0.0 0.0 0.0 34 34 34 34 34	4
62 0 0 0 73 53 0 0 0 0 73 42 0 0 0 0 73 58 0 0 0 0 73 59 0 0 0 0 73 73 73 73 73 73 74 34 34	3
53 0 0 0 73 42 0 0 0 73 58 0 0 0 73 35 0 0 0 0 73 59 0 0 0 0 73 73 73 0.0 0.0 0.0 0.0	0 2
42 0 0 0 73 73 73 75 75 75 75 75 75 75 75 75 75 75 75 75	7
58 0 0 0 73 35 0 0 0 73 59 0 0 0 73 74 5 0 0 0 0 0 0 73 75 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	. 0
35 0 0 0 73 59 0 0 0 73 	6
59 0 0 0 73 	0
49.6 0.0 0.0 0.0 0.0 0.0 0.0 0.37 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.	0
.37 0.0 0.0 0.0 4 34 34 34	9 1.6
4 34 34 34	.84 1.58 1.
	4 34 3

APPENDIX 6-1-M3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

(DAY) 734 734 734 734 734 734 82014 NO. OTHERS 000000000000000 EXPERIMENTAL MONOCYTES 0000000000000000000 CELLS PER HUNDRED) PLASMO-CYTES DIFFERENTIAL LEUCOCYTES COUNT (NUMBER OF LYMPH0-CYTES BASO-PHILS EOSINO-PHILS STAB. NEUTROPHILS SEGMENT. 61 NUMBER ANIMAL 205 206 207 208 208 202 2210 2212 2212 2213 2213 2224 2225 225

CONTINUED (1)
6 - 1 - M3 - 2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

	(DAY)	3	2	3	2	2	3	2	3	3	3	3	3	3	736	3	3	3	2	3	3
; ; ; ;	OTHERS	0	A 0	0	0	0	0	0	0	0	Ο.	0	0	0	0	0	0	0	0	0	0
NDRED>	MONOCYTES	0	A . 0	ò	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLS PER HU	< ≻	0	A 0	0	0	0	0	0	0	0	0	0	0	,0	0	0	0	0	0	0	0
CNUMBER OF C	LYMPHO- CYTES	09	A 50	, N	5 7	54.	52	51	77	97	47	94	66	35	52	58	99	53	8 7	37	58
YTES COUNT	BASO- PHILS	1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	O A	•	0	0	0	0	0	0	0	0	0	0		0	0	0	0	0	0
LEUC	EOSINO- PHILS		A 1		2	0	īV	0	0	0	2	₹	0	M		20	~	М	2	М	. ·
DIFFEREN	OPHILS STAB.		Α		ı (М	ιΛ	M	,	М	त्न	8	0	•	~ ~	0	<	0	0	←	·
	NEUTRO SEGMENT.		A 4.6	. ال	52.5	52	38	949	5 2	5.7	0.5	20) -	۷ -	7 7	39	3.1	77	20	29	07
 	ANIMAL NUMBER	10	3 0	J C	1 0	1 10	N (1 m	M) K) M	M	۱ ۲	۱ ۲	23.6	7	- 4	. 4	. 4	7	ľ

A : EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION.

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6-1-M3-2	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 PPM (MALE)

14		(DAY)	736	
EXPERIMENTAL NO. 82014		THERS	00	• • ← 1
EXPERIMEN		ПS		• • ← 1
	ELLS PER HU	PLASMO- CYTES		
-	UMBER OF C	LYMPHO- CYTES		51.0 12.77 41
	TES COUNT (N	BASO- PHILS	100	0.0
	IAL LEUCOCY	EOSINO- PHILS	1 ~ 0	11.63
	DIFFERENT	PHILS STAB.	~ ~	11.14 1 1 1 1 1 1 1 1 1
	! ! ! ! ! ! !	NEUTROPHILS SEGMENT. ST	41 48	MEAN 45.9 1.2 S.D. 12.55 1.14 N 41
•		ANIMAL	251	M M M M M M M M M M M M M M M M M M M

APPENDIX 6-1-M4-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM (MALE)

							EXPERIME	NTAL NO. 82	014
1 2 1 1 2 1		DIFFEREN	IAL LEUCOC	ES COU	CNUMBER OF C	ELLS PER H	l m l		{
N L M A L	NEUTRO ENT.	LS STAB.	OSINO	BASO- PHILS	MPHO- YTES	PLASMO- CYTES	MONOC	OTHERS	
301	52	0	-	0		0	0	0	733
, 0	ıM	√-		0	97	0	0	0	733
0	. 41	0	~	0		0	0	0	M
0	39	₽	~	0		0	0	0	M
0	58	0	0	0		0		0	M
0	53		·~-	0		0	0	0	M
0	, 51		7	0		0		0	3
\leftarrow	39	든	0	0		0	0	0	M
\leftarrow	36	Ø	~	0		0	0	0	M
\leftarrow	5.1	7	7	0		0	0	0	M
\leftarrow	77	0	2	0		0	0	0	M
\leftarrow	20	7	М	0		0	0	0	M
\vdash	52	2	2	0		,0	0	0	M
\sim	35	↤	Ŋ	0		0	0	0	3
\sim	41	ਜ	0	0		0	0	0	M
2	9	₽	~	0		0	0	0	M
\sim	29	2	0	0		0	0	0	M
M	34	7	М	0		0	0	0	M
3	43	7	0	0.		0	0	0	М
М	54	0	2	0		0	0	0	3
								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

APPENDIX 6-1-M4-2 CONTINUED

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM

(MALE)

14		(DAY)	M	M	. 735	M	3	M	M	M	2	M	M	M	I M			1 1 1 1 1 1
TAL NO. 820		H H	 	0	0	0	0	0	0	0	0	0	0	0	0	0.0		33
EXPERIMEN	IDRED)	ONOCYT		0	0	0		0	0	0	0	0	0	0	0 1		0.0	
! ! ! ! ! !	ELLS PER HUN	CAA	0	0	0	0		0	0	0	0	0	0	0	0,	0.0		
	ပ	LYMPHO- CYTES			. 50											0,	11.91	33
	ES COUNT (BASO- PHILS	0		0	0	0	0	0	0	0	0	0	0	0	0.0	0.0	33
	AL LEUCO	EOSINO- PHILS	4	īV	0	⊣	٣	2	2	. 2	0	īV	0	~			1.53	
	FFERENT		1	. ~	ıN	Ľ	М	←	2	~	0	0	0	0	7		2.02	
		NEUTRO ENT.		. 0											42	7.		33
•	1	ANIMAL NUMBER	1 10) K	M	M	4	7	4	. 4	. 4	7	7	7	351	EA		

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F1-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 0 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

i		DIFFEREN	•	Υ Τ Ε S	(NUMBER OF C	ELLS PER H	UNDRED)		
ANIMAL NIMBER	NEUTRO	OPHILS STAB.	EOSINO- PHILS	BASO- PHILS	LYMPHO- CYTES	PLASMO- CYTES	MONOCYTES	OTHERS	(DAY)
) - (·	1	1				!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1
	√	·	~	0	41	0	0	0	.+
	ם מ	4 0	1 <-	C	38	0	0	0	-+
	7 P	4 L	٦.	ν C	A 60	0	O A	O A	.+
	י טר				7		0	0	-+
	7,	-1 - c	J~	o c	. 7	C	0	0	~ +
	4 (-1 (t C	o c	7 6	o C	C	0	~ +
7	/ 7	V	> <	o c	- 4	o C	o C	C	<+
0.7	5.1	> (⊣ (> 0	0 0	o c	· C	c	~ †
01	20	O 1	> (> () \ \		o c) C	্ব
01	41	3	5	>	0	> () (> c	٠,
5	25	2	0	0	72	0	5	>	٠t.
, 0	77	M	←	0	55	0	0	0	ᢐ.
7 0	7 7 7	7 V	O 4	0 V	A 61	A 0	0 A	0 V	IJ.
2 2 1 0) 4		· 1 2	0	55	0	0	0	741
7 0		C	0	0	87	0	0	0	Jt -
0 0) 1) (C	53	0	0	0	√t
7 (2 (t (-	1 C	o C) C	C	0	0	4
20	7	1) (> () \ \ \	· (c	~
02	43	←	0	0	97	> (> 0	> C	١.
02	50	↤	← 1	0	8 7	>	Э (> 0	† ~
C	77	2	← 1	0	53	0	0	5	J
1031	71	2	0	0	27	0	0	0	7 1

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6-1-F1-2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(FEMALE)
M d d
0
SEX :
AND
EVEL

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

				 	! ! ! ! ! ! !	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1
1 1	i !	۵	TIAL LEUCO	TES COUNT	(NUMBER OF C	ELLS PER H	UNDRED)	 	
ANIMAL NUMBER	NEUTRO SEGMENT.	ophils Stab.	EOSINO- PHILS				ONOC	OTHERS	(DAY)
1 0						 C C			1 <+
) N	7 7	> <	4 C) C		0	0	0	~ +
) M	- C	+ C	J O	0	80	0	0	0	742
9 0	0 6	0	· ←	0		0	0	0	à
9 0	25	√-	~	0		0	0	0	<+
40	33	← I	₽	0		0	0	0	✓+
04	69	~	←	0		0	0	0	✓t
70	3.5	0	0	0		0	0	0	4
70) rv - ki	2	~	0		0	0	0	4
40	A 40	3 ×	A 7	0 A		0 A	A 0	A 0	4
1052	4.5	⊣		0		0 !	0 1	0	4 1
l m	-		•	0.0		0.0			
	14.14	1.09	1.05	_		0.0	0.0	0.0	
	28		28	28	28	28			

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F2-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(FEMALE)
РРМ
10
SEX
AND
EVEL

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

	(DAY)	240	740	740	7 40	740	047	240	240	740	741	741	741	741	741	741	741	741	741	275	742
	OTHERS	0	O (O (A 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NDRED)	MONOCYTES	0	0 ·	0 (0 ·	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLS PER HU	PLASMO- CYTES		, A 0	0		A 0	0	0	0	0	0	0	0	0	0	0	o	0	0	0	0
CNUMBER OF C	LYMPHO- CYTES		A 69	69	4	A 48	77	42	51	54	99	94	7.4	64	63	52	54	45	20	2.5	73
YTES COUNT	BASO- PHILS		A 0	0		A 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LLEU	EOSINO- PHILS	0	A 5	2	(-1	A 2	~ 1	2	, 	↤	H	←	←	2	0	0	М	2	↤	0	M
FFEREN	OPHILS STAB.	2	A 2	⊣	2	A 7	M	7	· ←1		М	0	· (-1	M	7	₽	2	0	←	0	0
· ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	NEUTRO SEGMENT.	23	A 24	2	55	A 43	52	52	27	38	30	53	76	94	33	77	4.1	53	78	, r.	2.5
1 7	ANIMAL NUMBER	10	10	10	10	10	10	, ,	, (, (-	1	-	1 ←	1 (11	-	1 7	1 7	1 6	1 7	1131

CONTINUED 6-1-F2-2 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(FEMALE)
РРМ
10
••
SEX
AND
EVEL

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

;		DIFFEREN	TIAL LEUCOCY	TES	٦ ٦	CELLS PER H			
ANIMAL	NEUTRO		NIS		MPH	AS	MONOCYTES	OTHERS	
NUMBER			ЬНI	PHILS	CYTES	CYTE			(DAY)
1 1	46	 	0			0	0	0	4
1.5	16	0	0	0	84	0	0	0	742
13	89	0	2	0		0	0	0	4
13	77	0	- -1	0		0	0	0	4
14	84	~	7	0		0	0	0	4
14	4.5	0	←	0		0	0	0	4
14	A 59	A 2	A 1	A 0		0 A	A 0	A 0	4
14	· LO			0		0	0	0	4
7	5.5	7	~	0		0	0	0	4
7	5.7	~	~	0		0	0	0	7
17	. v	I 	· (\)	0		0	0	0	7
1151	. 17	0	0	0		0	0 1	0	4 1
I III	5 1		•	0.0	2.	•	0.0		
		1.72	1.03	0.0	14.13	0.0	0.0	0.0	
	29		59	59					

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F3-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 P.PM (FEMALE)

2		DIFFERE	IAL LEUCOC		CNUMBER OF C	ELLS PER H			
4 Z	NEUTRO		EOSINO	BASOL	LYMPHO-	PLASMO	MONOCYTES	0THERS	<
ו משו ו ה ו ה	ZI	- 1	1 L 1 L	I I	- I I - I	니 - I - I	1 1 1 1 1 1 1 1	! ! ! ! ! ! !	(DAY)
20	31	⊣	딘	0		0	0	0	4
20		₽	2	0		0	0	0	4
20		⊣	₽	0		0	0	0	4
20		₽	ſΛ	0		0	~ 1	0	4
1208		←	₽	0	24	0	0	0	740
21		⊣	0	0		0	0	0	4
21		↽	←	0		0	0	0	7
21		↤	2	0		0	0	0	4
21		0	2	0		0	0	0	4
21		~	0	0		0	0	0	4
21		2	~	0		0	0	0	4
21		23	0	0		0	0	0	4
22		0	ιν	0		0	0	0	4
22		0	←	0		0	↤	0	4
22		0	7	0		0	0	0	4
22		0	₽	0		0	0	0	4
23		М	₽	0		0	0	0	4
23		0	⊣	0		0	0	0	4
23		←	←	0		0	0	0	4
23		c	•	c		C	c	· ·	_

APPENDIX 6-1-F3-2 CONTINUED

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

(FEMALE)
Mdd
100
SEX
AND
-EVEL

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

)14		(DAY)	4	742	4	4	4	4	4	4	4	4			
TAL NO. 820	 1 1 1 1	OTHERS	0	A 0	0	0	0		A 0	0	0	0	•	0.0	28
EXPERIMEN	NDRED>		0	A 0	0	0	0	0	A 0	0	0	0	0.1		28
! ! ! ! ! ! !	ELLS PER HU	PLASMO- CYTES	0	A 0	0	0	0	0	A 0	0	0	0	•	0.0	28
	0	LYMPHO- CYTES	52	A 55	43	48	27	77	A 68	59	61	53	52.9	97.6	28
	TES COUNT	BASO- PHILS		A 0	0	0	0	0	0 V	0	0	0	0.0	0.0	28
	L LEUC		!	A 3	ſΛ	0	7	0	0 V	—	М	2		1.61	ω Ι
	DIFFERENT	PHILS STAB.	 	0 V		ſΛ	ę́́	۲	A 1		2	2	•		28
		NEUTRO SEGMENT.	43	A 42	Ŋ	47	48	55	A 31	M	34	43		6	
	; ;	ANIMAL NUMBER	1 6	7 (24	24	24	24	24	24	ر ا ر		 		,

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F4-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM (FEMALE)

114	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(DAY)	1 4	7	4 ^	t 7	- 4	7	7	7	4	. 4	. 4	7	4	4	7	. 4	. 4	. 7	177
TAL NO		01HERS	A 0	0 (o c) C	0	0	0	0	0	0	0	0	0	0	C	0	0	О С) 0
EXPERIME	DRED)	MONOCYTES		0 (> c) 0	0	0	\leftarrow I	0	0	0	0	0	0	0	0	0	0	0	0
	ELLS PER HU	PLAS	A 0 A	0 () C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	(NUMBER OF C	LYMPHO. CYTES	A 66	7 ,	2 4 Ο α	0 0	56	57	61	59	33	45	57	63	27	81	45	23	29	45	55
	TES COUNT	BASO- PHILS		> () C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TIAL LEUCOCY	EOSINO	A	7 14	n c	5	~	2	0	2	0	0	М	←	2	↤	2	⊣	2	2	0
! ! ! ! !	DIFFEREN	ILS STAB.	A 1	n c	o M	2	23	\leftarrow	← 1	⊣	₹	М	2	Μ	2	0	7	М	2	M	2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 	NEUTRO SEGMENT.	M	ν η γ γ	. v . v	35	39	0 7	37	38	99	52	38	33	67	18	67	73	37	20	7.7
 1 1 1 1	ANTMAL	U M B	30) (9 0	30	31	31	31	31	31	32	32	32	32	32	32	32	33	33	M 1 M

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F4-2 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM

(FEMALE)

ANIMAL NUMBER S 1334 1338 A	NEUTR EGMENT.	DIFFEF	O T T I A					 		1 1 1 1 1 1 1 1 1
UMBER 1334 1338 1338	NEUTR EGMENT.	1 1 1 1		L LEUCOCY	TES COUNT	R OF	S PER H	UNDRE		
UMBER 	EGMEN			ONISO	BA	I A	ASM	I NONOKATES I		
3 3 3 4 4 3 3 4 4 4 4 4 4 4 4 4 4 4 4 4		STAB		PHILS	PHILS	CYTES	CYTES	 - - - - - -	<u>.</u>	(DAY)
338 338 338	41	0	 	 	 0 0					1 ~
338	77	2		2	0	5.5) C) C	o c	† ~
4	2	0 V	A		A 0	A 79	O O	A 0	ο C	† ~
ر ر	51	0				7				† 7
34	42	2		←	0	55	0) C) C	t <
34	M	A 0	A	0	0 V	A 66	O &) O	Φ († 7
34	63	~		М	0	M				'
34	22	2		2	0	39	0	0) C	† 7
34	M	A 1	A	0	0 V	A 62	0 V	O .	Φ Ο C	7
34	22	0		0	0	7				t <
34	52	2		ſΛ	0	17) C) C	o c	t <
34	48	2		М	0	7.4) C) C	o c	t <
35	34	0		0	0	99	. С) C) C	t <
35	39	-←1		⊣	0	5.0) C) C	> C	t <
35	42	0		М	0	57.5	00	00	0	743
MEA					0.0	2 !		1 .	1	
s.D.	·		^	1.28	0.0	12.26				
Z	31	31			31	•	31	1	, K	

APPENDIX 6-2-M1-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX: 0 PPM

(MALE)

	(DAY)	I N	∞	809	\leftarrow	3	2	/	7	2	S	∞	0	2	0
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	OTHERS	 	0	0	0	0	0	0	0	0	0	0	0	0	0
NDRED)	MONOCYTES	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ELLS PER HU	PLASMO- CYTES	 	0	0	0	0	0	0	0	0	0	0	0	0	0
CNUMBER OF C	LYMPHO- CYTES			19											
ES COUNT	BASO- PHILS	0	0	0	0	0	O 87	0	0	0	0	0	0	0	0
IAL LEUCOCYT	EOSINO-	0	0	0	0	⊣	0	0	₽	4	0	0	↤	0	-
DIFFERENT	HILS STAB.		↤	0	0	₽	 ᢏ-1	2	ᆏ	0	0	0	0	0	0
	NEUTROP SEGMENT.	68		81	81					69					
	ANIMAL NUMBER		ω	10	13	16	21	22	24	27	29	34	43	67	50

APPENDIX 6-2-M2-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

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(MALE)

PER HUNDRED) SMO- MONOCYTES OTHERS TES O O O O O O O O O O O O O O O O O O O		(NUMBER OF CELLS	ES COUNT (NUMBER OF CELLS	S COUNT CNIMBER OF SELLS
S OTHER S OTHER S OF O O O O O O O O O O O O O O O O O	F			
	H0-	LYMPH CYTE	Y M P C Y T	ASO- LYMP HILS CYT
000000000000			7	2 0 4
00000000000			7	7 0
0000000000		34	M	0 0
0000000000			2	0 2
000000000			5	0
00000000			5	0
0000000	10	3.		N
000000	ا		2	0 2
00000	6		2	0 2
00000	2		3	0 3
0000	9		5	0 5
000	_		8	0 8
00	9		0,	
0	2	∞		0
	23	7		0

APPENDIX 6-2-M3-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 PPM

(MALE)

14		(DAY)	631	463	769	671	240
EXPERIMENTAL NO. 82014	 	OTHERS	0	0	0	0	0
!	DRED)	MONOCYTES	0	0	0	0	0
	LLS PER	PLASM CYTE	0	0	0	0	0
	UMBER OF	LYMPHO- CYTES	38	99	93	43	30
	1 1	BASO- PHILS	0	0	0	0	0
	DIFFERENTIAL LEUCOCYTES	EOSINO- PHILS	0	0	0	2	7
	1 1	AB.	 	7	0	Ŋ	0
		NEUTRO SEGMENT.	61	36	2	52	69
			204	223	544	245	247

APPENDIX 6-2-M4-2

**

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM

(MALE)

ANIMALS KILLED IN EXTREMIS

HUNDKED)
- MONOCYTES O
) - 1
. 08-5
SEGMENT.
J CC

APPENDIX 6-2-F1-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 0 PPM

(FEMALE)

							EXPERIME	TAL	014
		DIFFEREN	IAL LEUCOCY	S COUN	UMBER OF	ELLS PER H	NDRED)	 	
	NEUTRO SEGMENT.	PHILS STAB.	 	BASO- PHILS	ا > ت	ASMO- YTES	MONOCYTES	OTHERS	(DAY)
00		 	2	0		! ! ! ! ! ! !	0		1 4
1005	55	0	0	0	45	0	0	0	691
00		0	₽	0		0	0	0	↤
00		0	0	0		0		0	6
01		0	0	0		0		0	S
01		↤	₹	0		0		0	4
027		0	0	0		0	0	0	4
02		₽	0	0		0	0	0	∞
03		0	0	0		0	0	0	\leftarrow
03	65	0	0	0		0	0	0	0
03		0	0	0		0	0	0	\sim
04		0	0	0		0	0	0	0
04	45	~	0	0		0	0	0	/
04		₽	0	0		0	0	0	∞
05		~	0	0		0	2	0	0
0 5		ਦਾ	0	0		0	0	0	3

APPENDIX 6-2-F2-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 10 PPM (FEMALE)

	HERS (DAY)	72		95	0 629	89	29	73	63	59	89	71	89	72	99	62	
 	10 S																
UNDRED)	MONOCYTE	0	0	0	0	0	ᆏ	0	0	0	0	0	0	0	0	0	C
ELLS PER H	PLASMO- CYTES	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	C
BER OF	LYMPHO- CYTES				93												
TES COUNT	BASO- PHILS	0	0	0	0	0	0	0	0	0	0	0	0	<u>.</u>		0	c
IAL LEUCOCY	EOSINO- PHILS	 	M	0	0	2	Ę	0	H	2	0	0	0	⊣	↤	0	C
<u>ш</u>	HILS	1 1 1 1	~	₽	М	H	ᠳ	71	0	2	0	0	₽	0	Н	0	٨
	NEUTRO SEGMENT.	7			7									17		17	
MIMA		10	11	11	1120	12	12	12	12	12	13	13	13	14	14	14	ر د

APPENDIX 6-2-F3-2

S.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 100 PPM

(FEMALE)

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!		1 1 1			0				
		DIFFEREN	TIAL LEUCOCY	၂၀၁ Տ	ER OF	ELLS PER H	S		
AN I MAL NUMBER	NEUTRO SEGMENT.	PHILS STAB.	EOSINO- PHILS	BASO- PHILS	LYMPHO- CYTES	PLASMO- CYTES	00	HERS	(DAY)
20	27	0	0	0		0	2	 	l N
20	14	2	0	0		0	0	0	9
20	84	0	~	0		0	0	0	S
2	73	0	0	0		0	0	0	\vdash
21	52	0	⊣	0		0	0	0	\sim
2	48	←	2	0		0	0	0	2
22	67	0	0	0		0	0	0	9
22	Ø	0	0	0		0	0	0	\sim
22	17	4	←	0		0	0	0	↤
22	7.4	0	0	0		0	0	0	М
22	27	0	Ţ	0		0	0	0	7
23	80	0	0	0		0	0	0	0
23	75	⊣	0	0		0	0	0	9
1236	78	0	0	0	25	0	0	0	727
7 6	78	0	0	0		0	0	0	0

APPENDIX 6-2-F4-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-1)

LEVEL AND SEX : 1000 PPM

(FEMALE)

82014
0 N
EXPERIMENTAL

		DIFFEREN	IAL LEUCOCY	SCOUNT		ברבט אבא	X C C		
ANIMAL NUMBER	NEUTRO SEGMENT.	OPHILS STAB.	EOSINO- PHILS	BASO- PHILS	LYMPHO- CYTES	PLASMO- CYTES	MONOCYTES	OTHERS	(DAY)
30		0	0	0	52	0	0	0	10
30	99	0	0	0	36	0	0	0	$^{\circ}$
		0	0	0	93	0	0	0	
31	57	9	0	0	37	0	0	0	~
31	57	٣	0	0	40	0	0	0	S
31	12	2	0	0	86	0	0	0	
32	68	0	0	0	32	0	0	0	∞
32	55	7	3	0	41	0	0	0	М
33	78	0	0	0	22	0	0	0	M
33	52	T	←	0	46	0	0	0	\sim
	51	0	0	0	67	0	0	0	769
3	8	2	0	0	06	0	0	0	\leftarrow

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6 - 1 - M1 - 3APPENDIX

G A

INHALATION TOXICOLOGICAL STUDY IN F344 RATS CARCINOGENIC METHANOL 0 F AND CHRONIC

(HEMOGRAM-2 DATA HEMATOLOGICAL INDIVIDUAL

(MALE) PPM 0 AND SEX LEVEL

(104 WEEKS) SCHEDULE 2 0 KILLED ANIMALS NO. 82014

EXPERIMENTAL

(DAY) OTHERS MONOCYTES PLASM0-CYTES 0.0 000 00000 0.0 0.0 0.0 0.0 0.0 0.0 COUNT (X100/CMM) LYMPHO-5.60 13.23 15.39 13.11 10.78 22.40 11.97 9.80 9.43 CYTES 16.20 18.15 14.16 11.00 10.78 BASO-PHILS LEUCOCYTES 0000000000000 EOSINO-0.63 0.10 2.35 0.90 0.80 0.99 0.98 0.98 0.27 0.83 1.23 0.0 0.63 PHILS 3.96 0.69 0.88 0.94 0.66 1.89 0.60 0.27 0.21 0.48 STAB NEUTROPHILS SEGMENT. 31.49 72.00 56.00 13.20 17.08 11.73 12.25 23.76 10.56 6.93 8.91 8.97 7.35 10.34 14.52 3.70 15.12 8.40 (X100/CMM) COUNTS M B C NUMBER ANIMAL

APPENDIX 6-1-M1-3 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : O PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

	(DAY)	M	N) 14	7 17 1	7 0	2 1	7	M	3	M	1 6	1 C	7	3	3	1	1 1) L	7 I					1 1 1 1 1
	OTHERS			•		•						•	•	•				· c	• •	•	0.0				1 1 1 1 1 1 1
	MONOCYTES	1 4	8		A 0.0 A	٠	•				8	•	٠			•	•			•	•	,		34	
C M M O	PLASMO- CYTES	1		o. (0.0 A		•	•			•		•	6	•	1		0.0	٠ -	•	ı) (i		34	1 1 1 1 1 1 1
OUNT (X100,	LYMPHO- CYTES	1 6		15.17	A 7.48 /	8.1	3.9	6.4	3,39)	· ·	1.0	ν.	0.6	6 7	. v) (21.0	1.2	0.9	1 1	•		34	1 1 1 1 1 1
CYTES	BASO- PHILS	1	0	o <u>.</u>	A 0.0													•	٠	•	1			34	1 1 1 1 1 1 1
	EOSINO- PHILS	1 (٧,	7	0.11	2	7.	<u>-</u>	יונ			ά	•	9	0	•	?	.39	1.56	•	1	٠		34	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	PHILS STAB.	1			0.11 A	7.	7 '			•	• 4	7.	•	C	•		·	ň	0		1	0		34	
	NEUTRO SEGMENT.	1	7.6	٧.	3.3	18	0	, V	. u	· ·	0.8	9.0	7.7	 	 		9.0	7.1	8.2	00	1	8,1		34	
	WBC COUNTS (X100/CMM)		29	37	A 11	1.0	1 / 0	r 7	· ·	62	45	27	9 0	, ,	T 1.	7.4	43	39	A 52 A	20	1	۷.		7 ° 7	
	ANIMAL NUMBER		31	32	۱ کر ۱ کر) K	7 2	1 0	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	38	39	. () ,	н с t ~	4 Λ	45	94	47	87	5 7		ட	: c	ָ ה ה	2 ,

APPENDIX 6-1-M2-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 10 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

<u>.</u>	 	CDAYO	IM	M	733	3	3	3	3	3	М	3	17	3	3	3	M	M	M	M	10	3
		OTHERS		•	0.0	•	•	•	•	•	•				•	•	•		•	•		•
		MONOCYTES	! .	•	0.0		•	•	•				•					•		•	•	•
	CMMO	PLASMO- CYTES		•	0.0		•	•			•	•		•	•				•	•	•	0.0
	DUNT (X100/	LYMPHO- CYTES	3.6	3.2	13.44	0.8	٥.	3.5	٠,4	0.4	4.0	4.0	0.2	1.3	1.6	5.3	7.0	5.6	5.0	3.7	4.5	4.5
	COCYTES C	BASO- PHILS	•		0.0	•	•					•			•	•				6		• 1
	LEU	EOSINO- PHILS		•	٥.	•	٥.	?		ς.	٠.	۲,	5	• 4	•	۰,	5	•	7.	∞	9.	• 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	! ! ! ! ! !	PHILS STAB.		0	79.0	۷.	4	0	0	۲.	?	φ.	۷.	\sim	۶.	٧.	∞		਼	∞	٥.	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	 1 1 1 1 1	NEUTROI SEGMENT.	4.1	0.7	16.96	1.9	0.2	1.2	4.8	6.2	0.0	0.8	7.4	0.6	۲,	6.3	9.5	2.	8.5	1.6	4.8	1.0
	α	COUNTS (X100/CMM)	39	25	32	23	19	25	33	59	25	27	19	21	58	34	28	28	35	27	31	74
1 1 1 1 1 1	ANIMAL	M I	102	0		0	0	0	\leftarrow 1	\leftarrow	\leftarrow	, 	(\sim	\sim	\sim	2	\sim	\sim	2	3	MI

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14.67 4.14 34

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0.53 0.41 34

0.48 0.50 34

14.43 5.97 34

30.1 8.10 34

MEAN S.D.

22.62 12.60 28.35 17.60

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16.38 20.30 15.75

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

M D D W 10 AND SEX LEVEL

(MALE)

(104 WEEKS) ANIMALS KILLED ON SCHEDULE NO. 82014

EXPERIMENTAL

(DAY) OTHERS MONOCYTES 00000000000 PLASMO-CYTES LEUCOCYTES COUNT (X100/CMM) LYMPHO-15.99 28.35 17.48 17.55 11.00 11.00 14.00 16.00 CYTES 11.66 BASO-PHILS 000000 00000 0.0 EOSINO-PHILS 0.38 STAB. NEUTROPHILS SEGMENT. 21.84 14.85 119.38 8.00 8.00 14.00 12.72 8.14 9.90 COUNTS (X100/CMM) WBC NUMBER ANIMAL

6 - 1 - M3 - 3APPENDIX

S.

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

(MALE) РРМ 100 LEVEL AND SEX :

¥	ב			_	JCOCYTES C	OUNT (X100,	/CMM)			
ANIMAL		EUTRO	I _	SIN	ASO	MPH	ASM	MONOCYTES	OTHERS	
Ω	0			F H	PHILS	CYTES	CYTES	 	: ! :	(DAY)
201		1.7		0	•	3.0				1 100
0	5	6.8	0.	0		7.1	•	•		3
	.164	32.80	4.92	3.28	.0.0	123.00	0.0	0.0	0.0	: 733
0	₹	8.6	- 4	٠, 4	•	6.7		8	•	2
0	27	ς.	∞	0,		6.		•		3
0	34	8.7	٦,			4.6			•	3
0	. 21	9.4	.2	0		1.3		•		3
\leftarrow	33	۲,	3	6,		9.5	•			3
↤	17	6.2	4		*	ω.	۵	0	0	3
↤	58	5.0	.2	ů	•	3.0		•		3
↽	27	₹,	0.	0	•	ω.	۰	a		3
\leftarrow	22	1.8		•		4.6	•	0	•	3
\leftarrow 1	27	6.4	•	φ,	•	7.6	•	•	•	3
\leftarrow	24	۲.	۶.	0		7.2	•	•		3
\leftarrow	28	8 . 6		•		۲.	0	0	0	3
\leftarrow	20	0.	.2	٠, 4	•	5.4	•	•	•	3
\leftarrow	54	1.7	• 4	2,		1.5	8			3
\sim	31	6.1	•,	9.	•	3.6	0			3
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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 100 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

						LEU	COC	YTES C	N O O	T (X10	0 / CMM	1M >					
ANIMAL	WBC	1 =	100	1 _	1 .	1 2		1 0 5		Y M P H	1	LASM	W	NOCYTES	07 H E	RS	
NUMBER		SEGMENT) - •	STAB.		PHILS	<u>ā</u>	HILS	1	C		CYTES			 	1 1 1 1	(DAY)
10		1 7	1	1 7	1	7	 	1 4	I I	6.4	! ! !		1 		0	0	M
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J C	ე ი	י מ מ	C	•		77				2.5		•		0.		0	M
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U M		. 0		9		0	_	•		7.6		0:		•	0	0	3
) K		9 0		7.			-	•		4.5				•	0	0	M
N		3		٥.			-	•		5.3					o	0	M
'n		6.9		7.		•	_	•		1,5					o	0	3
) K		9 0		٠,٠		•	-	•		7.4		•		•	0	0	3
7 1		6.5		. 2		· o	-			5.5					0	0	3
) K		0.6		~			-	•		٠, 4				0	o	0	3
) K)	•	ш		ш		ш		ш		ш		ш	m			M
) K	24	32.9	Ē	0.54		.62		•		8.9	,	•			°	0	3
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7		9.3		0		3				3.3					°	0	M
. 4		7,5		•		ω.				0.6					•	0	m
. 4		0.7		9.		0		•		5.5		8		0	Ċ	0	3
٠ V	. 7	∞				• 4				4.3		•			Ö	0.	3

: EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION. : EXCEEDED THE UPPER BOUND OF INDICATOR αш

CONTINUED(2)
6 - 1 - M3 - 3
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 100 PPM (MALE)

EXPERIMENTAL NO. 82014	UNT (X100/CMM)	SMO- MON TES	0.0 0.0 0.0	0.0
	00		26.52	18
		OSINO- PHILS	3.64 0.0	2 S
			0.52	0.51
		NEUTROPHILS SEGMENT. STA	! !	16.38 7.34 40
	, (WBC COUNTS (X100/CMM)	52 46	.36.4 23.55 40
:		AN LMAL NUMBER	251	

APPENDIX 6-1-M4-3

3°3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

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NO. 82014	1 1 1 1 1 1 1	OTHERS				> 0 • 0	, ,	, ,	•	•			5	8	8		•	ĸ		9			
EXPEKIMENIA		MONOCYTES	1	8	•	0.0		•		, ,				e	• 1	D							
	Σ	PLASMO- CYTES	10	•		0.0			0			D		, ,				8	0				
	UNT (X1	LYMPH	0		1 10	13.57	4.7	0.0	7.6	5.6	9	8.0	7.8	9.2	1.8	- α	7 . 4	. Y) C) /) (٠	0	6.2
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	COCYTES CO	S0- ILS	, .			0.0	•			•													
	LEU	EOSINO- PHILS		0	2	0.23	0.	ς.	∞	0.	₩.	.7	9.	9.		7.	~	72.0	C	0	70.0	0.0	74.0
1	1 1 1 1 1 1	PHILS STAB.		•	0.	0.23	٥.	٥.	٠,4	3	Ϋ́	٠.	٥.	9.	ω.	3	Б.	М	7		1 .	3	
		NEUTRO	1.4	3.2	٠,	8.97	0	ω. Ω.	7,5	0,1	1.5	2.4	4.5	1.5	4.0	9.1	3.3	2.2	3.5		٠ .	٥	٥. ٥.
	Ω	COUNTS (X100/CMM)	22	5	. 27	23	35	. 52	22	26	32	77	33	23	27	56	30	37	23	27		1 0	5 /
	ANIMAL	NUMBER		\circ	\circ	304	\mathcal{O}	\circ	\circ	~	<∹ ⋅	ᠳ ⋅	\leftarrow	↤	\leftarrow	\sim 1	\sim 1	\sim 1	\cap	N		\sim \sim	Λ I

APPENDIX 6-1-M4-3 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM (MALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

(DAY) EXPERIMENTAL NO. 82014 OTHERS 0.0 0.0 0.0 0000 0.0 0.0 0.0 ш MONOCYTES 000000000 0.0 0.0 0.0 ш PLASMO-CYTES 0.0 0.0 0.0 0.0 LEUCOCYTES COUNT (X100/CMM) ш LYMPHO-11.44 33.39 16.20 17.82 20.00 15.84 12.95 14.04 CYTES 12.15 17.49 15.22 4.81 BAS0-PHILS 00000000 0.0 0.0 0.0 0.0 ш EOSINO-0.0 1.80 1.06 0.43 PHILS 74.0 1.05 0.72 0.54 0.53 0.52 0.57 0.0 ш 1.06 2.20 99.0 0.80 1.05 0.36 0.54 0.64 STAB NEUTROPHILS ш SEGMENT. 19.20 25.52 19.95 20.88 13.77 33.39 19.08 18.06 15.79 12.87 10.56 5.90 (X100/CMM) 9.03 COUNTS 32.2 MBC WBC ш NUMBER ANIMAL 335 336 337 338 342 343 340 344 345 348 351 MEAN S.D.

: EXCEEDED THE UPPER BOUND OF INDICATOR

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F1-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 0 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

LEUCOCYT	EUCOC	EUCOC	EUCOC	0000) 「 「 「 「 「		T (X100	L C Z	 	i 		 	! - - 	
i	1 1 1		1 1		1	1 1 1	1		1	1 1 1 1	1	1 1 1 1 1 1 1 1	1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	
N N N N N N N	TROF	PHILS STAB.		EOSINO- PHILS	മെ	3ASO- PHILS	<u>l</u>	YMPH0- CYTES	<u>α</u>	LASMO- CYTES	Σ	ONOCYTES	H L O	ERS	(DAY)
1 1	i	1 1	1	1 4	1	1	! !	7 - 7	1	1 .	 	1 1	0	1 .	1 4
		, ת		•		•		. <		•					7
200	۵		Ø	0.30	A		Ø	18.00	Ø	. 0	V	O.O.	0	0.	740
. ~	:	M						9.9				•	0		4
2		7.		9.				5.6		•		٠	0	٠	4
ω.		ω		•				1.2		٠			O		4
α		0				•		6.4		•		•	O		4
5				•		•		4.5				•	O	•	4
5.		٦.		•		•		0.0		•		•	O		4
ς.		9.						5.7				•	O	•	4
ς.		۷.		•				3:7		•		•	O	•	4
٠.	Ø	٥.	A	•	A		A	4.6	A	•	A	•		•	4
0				•				1.0		•			O		4
ъ.		0		•				2.6				•	0	•	7
W		2		•				4.8		•		•	O		4
7.						•		3.0		•			O	•	4
W.		۲.		•				3.4		•		•	O	•	4
0		.2		•		•		0.5				•	O	٠	4
5		4.				•		2.7				•	O	•	4
4.		∞		•		٠		0.8		•		•	O		4

APPENDIX 6-1-F1-3 CONTINUED

*

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

(FEMALE)

РРМ

0

LEVEL AND SEX :

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

	(DAY)	742	t t	4	4	4	4	7	4	4	4 1			
 	OTHERS	00				•		٠			• 1	0.0	0.0	
1 1 1 1 1	MONOCYTES					•	•			٠	• 1	0.0		28
CMMO	PLASMO- CYTES	0.00			•			•	•	0.0	• 1		0.0	. 28
COUNT (X100/	ILI			2.4	3.6	3.6	7.5	1.2	9.	11.0	8 1	6.6	17.50	\sim
COCYTES CO	BASO- PHILS	1 •									•	•	0.0	28
LEU	EOSINO- PHILS		\sqrt{c}	. 0		ς.	2	0	9		0.			28
	HILS STAB.	10.			. ~		'n	0	9	9.	М.	! w		28
	NEUTROP SEGMENT.	6.5	13.16	, o	6.7	0	9	5.7	0	8	.75	1 2	Ŋ	28
1 (WBC COUNTS (X100/CMM)		× ×		\sim						35	1 8		28
1 :	ANIMAL NUMBER	0.3	1034	7 0) C	200	0.4	70	0.4	70	0.5	I LL	· _	

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F2-3

A. Ta

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 10 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

L NO. 82014	
EXPERIMENTA	

												- 1		1	 	
IMAL MBER	WBC COUNTS (X100/CMM)	NEUTR SEGMENT.	10 P H	I L	l I	OSI PHI	BASO- PHILS	 	LYMPHO- CYTES	170	ASMO- YTES	ω W	NOCYTES	0	THERS	(DAY)
10	57	! -	1	-	1			! ! !	2.7	.) ! ! !		 		 		4
) C	A 27 A	4.9	A	5	A	8		A	8.63	A		A	9	A	•	4
) C	- 0	, w	:	~		.58			0.0	~	•		•		•	4
) C	72	8.7		9		М.	•		4.2	~					•	4
106	A 26 A	7 7	A	1.82	A	0.52 A	0.0	A	12.48	Ο Α	0.0	A	0.0	A	0.0	240
C	35	18.2		0		ν.			5.4	_	•					4
C	32.5	8.2		7.		۷.			7.4	-			•		•	4
) C	000	7.6		2		ς.			0.2	_			•		٠	7
, ~-	27	< ≥		∞		2			4.5	~						4
· <-	. K.	6.6		٥.		ь.			1.7	-			•		•	7
۱ <-	53	ω,		0		ς.			3.3	-			•		•	4
-	28	6.7		ς.		2			0.7	_					٠	4
1 <	25	₹.		9		٠,4	•		0.7	,			•			4
· ←	23	7.5		٥.					7.7	-	•		•		•	4
ا ج	24	N.		ς.			•		3.2		•		•		٠	4
ı ۸	19	7.7		ν,		'n	•		0.2		•		•		•	4
ı c	2.4	2 7		0		4.	•		0.8	_	•				•	4
1 V	· &	7		•			•		9.6		•				•	4
1 U	1.0	0.6		0					٥.	•	•				•	7
1 L	- L	`							О							Υ,

APPENDIX 6-1-F2-3 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 10 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

	CDAYO	742	742	742	742	742	743	743	743	743	743	743	743	 		
	OTHERS	1 .	•	•	•	•	•	0.0	•		•	•	•	1 .	0.0	\sim
	MONOCYTES		•	•		•	•	0.0		•			•	1 .	0.0	\sim
00/CMM)	PLASMO- CYTES				•		•	0.0	•		9				0.0	
(X1	LYMPHO- CYTES	2.4	0	9.	9.	9.	₩,	5.70 A	7.	₽.	ω.	∞		! ∞ !	7.02	29
COCYTES	BASO- PHILS	1 .		•		•	•	0.0		•			•		0.0	59
LEU	SH		•	٠,4	€4	∞	2.	0.15 A	• 4	₹.	₽.	'n	0		0.26	
	Η N		8				•	0.30 A		٥.	•	٧.			∿.	
	NEUTR EGMENT.	. 5	4.0	٥.	5.2	0	٠,4	8.85 A	4	7.0	٥.	ν,	1.2		2.8	
l c	COUNTS (X100/CMM)	23													δ.	
	a M		13	13	13	14	14	14	14	14	14	14	15	ш		Z

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F3-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 100 PPM

(FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

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	(DAY)	1 4	4	740	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	OTHERS	1 .	•	0.0	•	•	•	•	•		•		•	•	9		•	•	•	•	•
	MONOCYTES			0.0	•	•	•	•	•	•	•	•	•		•			•		•	•
CMM)	PLASMO- CYTES		•	0.0	•		•	•	•	•	•	•	•	•	•	•			•	•	
UNT (X100/	LYMPHO- CYTES	0.1	4.5	14.21	7.1	4.1	3.1	6.5	1.7	2.1	4.0	0.1	8.2	٠.	5.5	3.6	6.5	φ.	7.4	9.6	C
COCYTES CO	BASO- PHILS		•	0.0	•	•		•	•			•	٠		•			•	•	•	
LEU	LZ		0	5	٠,7	3	0	ω.	٠,4	9.	0.	6.	0	6.	'n	٥.	ь.	\sim	₩,	₹.	5
 	HIS	. 1	₽.	0.29	ň	κ.	ω	ς.	ς.	0	• 4	5.	• 4			•		•	•		•
	шш	1 %	4.0	14.21	5.4	5.3	0.5	5.9	1.5	9.2	υ.	۰.	ь.	٧.	5	ŭ	6.1	0	0.1	٥.	7
α	COUNTS (X100/CMM)			29																	
ANTMA	N M B	20	20	1205	20	20	21	21	21	21	21	21	21	22	22	22	22	23	23	23	23

APPENDIX 6-1-F3-3 CONTINUED

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 100 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

7		(DAY)	7	4	4	4	4	4	4	743	7	4 1			
NO. 8201	; ; ;	THERS		•		•	٠		•	0.0		• 1	0.0		28
(PERIMENTAL		ONOCYTE		•	•	٠	•	٠	•	0.0	•	• 1	0.03	₹.	
Ж Ш	MMS							•	•	0.0		•	0.0		28
: : : : : : : :	JNT (X100/CMM	MPHO- YTES	9	\sim	ਂ	•	٠, 4	3.6	6.3	10.03	0.9	2.1	∞	6.34	28
	OCYTES COL	SO	•	•	•	•	•	•	•	0.0	•		0.0		28
		OSIN	1 2	•	0.	•	•	0	•	 1	₽.	• 4			28
		HILS STAB			2.	٥.	₹.	δ.	ς.	\leftarrow 1	W.	7.	1 8	0.31	28
		N M M M H	. 7	3	٧.	7.	•	0	7.4	6.63	← 1	∞.	. 2	5.70	28
		COUNTS (X100/CMM)								17				9.65	∞
		ANIMAL	23	23	24	24	24	24	24	1248	25	S	ΙШ	S.D.	Z

A > EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F4-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM (FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

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	(DAY)	7	740	4	4	4	4	4	4	4	4	4	7	4	7	4	4	4	4	4	4
 	OTHERS		0.0	•	•	•	•	•	•	•	•			•		٠	٠				
	MONOCYTES		0.0	•	•	•			•	•			•	•		٠	•	•		•	•
CMM)	PLASMO- CYTES		0.0				•	•					•	•	٠		•				
NT (X100/	-0 S	1.1	17.82	3.6	3.9	2.4	6.8	5.9	8.4	4.7	7.2	1.2	0.2	8.2	0.3	8.6	9.8	6.6	2.	0.3	2.1
OCYTES COU	BASO- PHILS		0.0	•	•			•	•			٠			•	•	۰	•	•	•	
LEUC	EOSINO- PHILS	1 10	99	0	0.0	₹.	9	0.56	0	0.50	0.0	0.0	r,	٥.	77.0	•	ω.	2	ь.	٠,4	•
	ILS STAB.	1 10	65	0	φ.	.7	٥.	$^{\circ}$	9.	2	ς.	.7	ω.	∞	٠,4	٥.	٧.	∞.	ω.	9.	• 4
	MENT HE LE	0.2	87	9.3	4.2	3.3	1.7	1.2	3.3	9.5	4.5	3.0	6.8	'n	0.7	0.8	ī,	7.	7.0	ν.	7.6
Ç	COUNTS X100/CMM)	1 10	33																		
} -	ANIMAL NUMBER (30	1303	30	30	30	31	31	31	31	31	32	32	32	32	32	32	32	33	33	33

A ; EXCLUDED FROM STATISTICAL CALCULATIONS BECAUSE OF AGGREGATION

APPENDIX 6-1-F4-3 CONTINUED

sp P

Signal Si

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM

(FEMALE)

ANIMALS KILLED ON SCHEDULE (104 WEEKS)

EXPERIMENTAL NO. 82014

ANTMA		ι α]		1 1 1		EUC	OCYTES	000	:	10	CMM)	! !	1	1		
a M D	C	COUNTS X100/CMM	ξ	NEUT SEGMENT	0 P	HIL		SIN		BASO- PHILS	 - 	LYMPHO- CYTES		PLASMO CYTES		MONOCYTES	O ()	7 7 7 1 1 1	(DAY)
3 1	! !	22	! !	0	1 1 1		! !	1 2	1 1 1		 	2.7	1	1 .	! !			1 .	1 4
33		28		ω.				₽.		٠		4.5						•	. 4
1338	A	36	A	7.20	A	0.0	A	0.36	V	0.0	A	28.44	A	0.0	A	0.0	A	0.0	742
33		22		2				~.				0.5		•				•	4
34		22		9.2		٠, 4		ς.				2.1		•		•		•	4
34	A	32	A	0.8	Ø	0	A	0	A	•	A	7.	A	•	A		A	•	4
34		34		1.4		•		0		•		0.8		•		•		•	7
34		23		3.1		, 4		. 4				8.9				•		•	. 4
34	A	29	A	0.7	¥	۷.	A	0	Ø		A	7.9	٧		⋖	•	V	•	. 4
34		82		0		0		0		•		6				•	:		. 4
34		2.1		6.0		٠						8.6		•					. 4
34		18		9.		W.		'n				7.		•					7
35		28		5		0		0		•		8.4		•					4
35		17		۰.				٠				0.0		•				•	4
35				ī.		0.				•		. 7		٠					4
MEAN	: 	30.2	1		! !		! !		 		 	6.5	 		!!!!	10	1		
		7		υ.		٠,4		ň		0.0		12.31		0.0		0.11			
z														31				31	

APPENDIX 6-2-M1-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 0 PPM

(MALE)

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

LS EOSINO
•
0.0
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•
0.88
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E :Exceeded the upper bound of indicator.

APPENDIX 6-2-M2-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 10 PPM (MALE)

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

1

	(DAY)	710	-	7 C	- r	N D	ე ←	٠,	1	0	~	7	- 1	γ,	-	9	0	069
	0THERS	- 1	•		•	•	•	•	•		•		•	•		0.0		0.0
	MONOCYTES	1			•			•		•						0.0	ш	0.0
CMM)	PLASMO- CYTES	- 1	0.0			•		•	•						,	0.0	Ш	0.0
! >	LYMPHO- CYTES	1 72	S	Ŋ	5.0	0.6	7 8	· α) i	2.5	~	2.2	7))		56.62	ш	38.70
LEUCOCYTES CO	BASO- PHILS		0.0			•	•	,	•		•		•		Ć	0.0	Ш	0.0
LEU	OSINO	1.20	0.0	3.70	•	0.0		0-0		•		0.70	7.	U.	c))	Ш	0.0
	PHILS STAB.		0.0	•	٦.	0.	•	6	·	•	N.	ν.		ш	· ·	·		3.60
1 1 1 1 1 1	NEUTRO GMENT.	2.4	14.50	5.1	4.9	3.0	6.6	0.2	7	•	9.6	1.7	8.0	ш	70 077	00.	1	47.70
	COUN 100/	09	25	7.4	52	75	66	8 7	C IC	0 0	22	35	75	ш	007	``		06
ANIMAL	D N	10	105	0	\leftarrow	\leftarrow	↤	\leftarrow 1	<u>_</u>	٠,	V	N	S	33	۲	7 0	٠ ر ۲	~ 1

E :Exceeded the upper bound of indicator.

APPENDIX 6-2-M3-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX: 100 PPM

(MALE)

ANIMALS KILLED IN EXTREMIS

7		(DAY)	631	463	769	671	240
L NO. 8201	! ! ! !	THERS	0.0	0.0	0.0	0.0	0.0
ERIMENTA			0.0	0.0	0.0	0.0	0.0
	CMM)	PLASMO- CYTES	0.0	0.0	0.0	0.0	0.0
	UNT (X100	LYMPHO- CYTES	24.32	19.20	458.49	97.6	26.10
	COCYTES CO	BASO- PHILS	0.0	0.0	0.0	0.0	0.0
		INO- ILS	0.0	0.0	0.0	0.44	0.87
		HILS STAB.	0.64	1.28	0.0	0.66	0.0
		NEUTRO SEGMENT.	39.04	11.52	34.51	11.44	60.03
		S MM)	64	32	493	22	87
			204	223	544	245	247

APPENDIX 6-2-M4-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM

(MALE)

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

	(DAY)	10	7	2	S	\leftarrow	\leftarrow	∞	289	6	\leftarrow	S	↤	2
	OTHERS	1 1 1 1 1 1 1				0.0			0.0		0.0	0.0	0.0	•
	ONOCYTES	· · · · · · · · · · · · · · · · · · ·	0.0	0.0	0.0	0.0	0.	臼	0.0	团	0.0	0.0	0.0	
MM >	PLASMO- M CYTES		0.0	0.0	0.0	0.0	0.0	E	0.0	H	0.0	0.0		•
	YMPHO- CYTES		2.9	٥.	2.8	23.18	٠,4	臼	12.65	团	2.0	250.98	4.9	0
CYTES COUNT	BASO- I		0.0	0.		0.0		团	0.0	田	0.0	0.0	0.0	0.0
 	OSINO-	· · · · · · · · · · · · · · · · · · ·	0.37	13.24	1.31	0.0		田	0.55	田	7.44	0.0	1.47	
1 1 1 1 1	ILS E	 田 田	0.0	0.0	0.0	1.14	0.0	臼	0.0	田	•	0.0	•	•
1 1 1 1 1 1 1 1	NEUTROPH EGMENT.	日日	3.6	2.6	6.8	13.68	9.		41.80	田	٧.	31.02	0	۷.
! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	WBC COUNTS (X100/CMM) S	日	37	662	131	38	16	臼	55	闰	124	282	67	701 1
	ANIMAL NUMBER ()	1 1	0	← 1	↽	\leftarrow	\sim	2	323	\sim	\sim	3	М	4

E : Exceeded the upper bound of indicator.

APPENDIX 6-2-F1-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 0 PPM (FEMALE)

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

	(DAY)	- 1	691	\leftarrow	0	S	4	7	∞	\leftarrow	6	\sim	0	/	∞	9	2
; ; ; ; ;	OTHERS	•	0.0	•	•	•		•	•	•	•		•		•	0.0	•
	MONOCYTES	•	0.0				•	•	•	•	•	田田	•	0.0	•	13.98	•
CMM)	PLASMO- CYTES		0.0	٠	•	•	•	•	•	٠	•		•	•	•	0.0	•
COUNT (X100/CMM)	LYMP	. 6	6.75	۶.	0.5	₽.	ъ.	0.7	4.2	•	5.7	E	8.2	1.4	0.1	566.19	7.66
EUCOCYTES CC	SH		0.0	•	•	•		•	•	•	•	田	•	•	•	0.0	
LEU	OSIN		0.0		0					•			•	•		0.0	•
	LS TAB	1 .	0.0	•	•	•		•		0				6.	۷.	13.98	٥.
	NEUTRO SEGMENT.	10	∞	9.	4.5	5	9.3	0.2	0.3	7	9.2		3.80	43.6	8.5	ω	0
	COUNTS (X100/CMM)	27	72	13	35	7.0	19	21	4 5	455	4	ETI ETI	692	0		0	269
1 2	AN I MAL NUMBER		00	00	00	0.1	01	0 2	7	0.3	03	0.0	70	0.4	70	0.5	1051

E:Exceeded the upper bound of indicator.

APPENDIX 6-2-F2-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 10 PPM (FEMALE)

ANIMALS KILLED IN EXTREMIS

82014
N O N
EXPERIMENTAL

	(DAY)	OΙ	ın	561	S	∞	/	3	M	S	١٥	ο ,	, (∞	\sim	9	\sim	М	ን (7 1
; ; ; ;	OTHERS	•	0.0	•		•	•	0.0	•		•	•		0.0				C) ·	•
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MONOCYTES		0.0	•	ш	•	•	0.0	•		•	0.0		0.0		ш		c	0.	•
CMM)	PLASMO- CYTES		0.0	•	ш	•	•	0.0	•	•	•		臼	0.0				•	0.0	•
COUNT (X100/CMM)	LYMPHO- CYTES	5.10	13,12		ш	15.0	6.2	11.73	7.7		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		田田	111.60		ш		1	5.55	.3
LEUCOCYTES CO	BASO- PHILS		•	0.0		0	•	0-0	•	•	•	0.0		0.0				(0.0	0.0
LEU	EOSIN	! ~		0.0		0.4	~				>		田	0.0		LL		,	0.0	
	HILS STAB.	1	. 4	6.08		5.5	. ~	000		•	•	•	田	1.24		u	1 11		•	0.0
	NEUTROP SEGMENT.	1 6		85.12	! •	7 7	, k	11.00		† ·	0.1	5.4		11.16		ц	JL		۲.	6.63
Ç L	WBC COUNTS (X100/CMM) S		7 7	30.40	ш Э	7,	7 C	7 C	O 0	7.0	ᠸᡰ	326	田田	124		ן ני				13
•	ANIMAL NUMBER	1105	, (- -	4 6	7 7	7 6	J () (,	7	12	13	13	13	7 1	t	† ·	14	15	S

E : Exceeded the upper bound of indicator.

APPENDIX 6-2-F3-3

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

(FEMALE)
ЬРМ
100
SEX :
AND
LEVEL

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

E : Exceeded the upper bound of indicator.

APPENDIX 6-2-F4-3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

INDIVIDUAL HEMATOLOGICAL DATA (HEMOGRAM-2)

LEVEL AND SEX : 1000 PPM

(FEMALE)

ANIMALS KILLED IN EXTREMIS

EXPERIMENTAL NO. 82014

! ! ! ! ! !	(DAY)	069	722	732	671	652	735	683	736	736	728	769	718
] [OTHERS		0.0		0.0							0.0	
	MONOCYTES	0.0	0.0	ш	0	0.0			•			0.0	
CMM)	PLASMO. CYTES	0.0	0.0			. 0 0					0.0	0.0	
COUNT (X100/CMM)	LYMPHO- CYTES	7.3	20.88	11.	14.80	10.00	3.5	20.80	7.2	6.2	0	∞	468.90
LEUCOCYTES (BASO- PHILS	0.	0.0			0 ° 0			8				۰
LEU(EOSINO- PHILS	0.0	0.0	ш		0.0			1.26			0°0	
! ! ! ! !	HILS STAB	! !	0.0		٠,4	0.75	6.	•	•	0.0	0.15		10.42
! ! ! ! ! ! !	NEUTR SEGMENT.	403.68	37.12	ய	2.8	14.25	٠,	4.2	3.1	٠.		6.12	
3	COUNTS X100/CMM)	841	58	ш	0 7	25	746	92				12	521
ANTMAI	NUMBER	5	0	30	7	1312	31	32	\sim	33	3	1337	7

: EXCEEDED THE UPPER BOUND OF INDICATOR

APPENDIX 7-1-M1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 0 ppm

Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day) 734 734 735 735 735 Tri- Free Fatty glyceride Acid 136.88 (M Eq/1) 681.4 611. 856. 703. 412. 690. 624, 688. 695. 726. 770. 721. 566. 629 711 586 (mg/dl) 34.93 150.0 135. 129. 180. 152. 105. 198. 162. 199. 120. 20 217 170. 97 132 167 125 187 165 Cholesterol 20 27.45 (mg/dl) 155.5 Total 116. 162. 120, 113, 184, 211. 132. 130. 164. 190. 180 118 160 (mIU/ml) 61.82 183.2 201. 279. 128. 152. 135. 158. 281. ALP 171. 203. 156. 148. 135. 162. 117. 170. 20 5.0710 (mIU/ml) 5.983 G-GTP 6.03 18.42 1.66 2.71 4.72 6.03 15.63 2.27 15.89 4.10 1.40 96.0 5.33 5.41 3.32 6.46 .35 (mIU/ml) 187.97 459.0 LDH 261. 624. 620 295 618 598 225 530 340 316 733 233 432667 (mIU/ml) 34.3 20 17.41 GPT 29. 28. 225. 225. 220. 220. 221. 220. 230. 34 28 28 (mIU/ml) 34.98 76.6 20 103. 107. 162. 52. GOT 53. 61. 150. 62. 54. 50. 64. Number Animal 18 19 20 Mean S.D. Z

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APPENDIX 7-1-M1 CONTINUED(1)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

desirente.

Level and Sex: 0 ppm Male

Animals Killed on Schedule (104 Week)

1		- !																				i			į
1 1 1		(Day)	733	\sim	Y C	90	$^{\circ}$	2	n. c	n	\sim	\sim	\sim	\sim	~) (າ	\sim	Y) (T) (T) (T) (T) [1
	Inorganic Phosphate	(mg/dl)		4.3	٠						•	٠	•	•		٠	•	•	•	4.9	•	٠,			0.346
• .	Calcium	(mg/dl)		10.3	·	· 0	· 0	0	ر د	0	•	0	ŝ	•	0	÷.	ص	Ö	•	10.4	0	•			0.358
	Urea Nitrogen	(mg/dl)	15.	16.	17.		14.	12.	13.	15.	15.	14.	14.	15.	14.	17.	9	16.	12.	26.	13.	15.		20	3.22
	A/G		1 2	0.86	٦.	7.		.7	۳.	٣.	۲.	ω.	9.	ω.	9.	0	0.	.2	.	2	٦.	۳.		20	
	Albumin	(g/dl)	10		3.12	\sim	€.	4.	ゼ	7		္ထ	ς,		ထ	സ		· (*)	m		(۲)	3.38	•	20	0.3380
	Total Protein	(g/dl)	1 9	ວິສີດ	6.	6.	4.	۲.	6	7.	6	.0	8	6	, &	4	, ,	. 0	ຸຕຸ	ω,		4.			
	Glucose	(mg/dl)	i <	 	9	4	\vdash	\sim	4	~	٦ () (4	• ~	7	4 (*) (20	: (1)		V	122.	10	137.0	13.79
	Phospho- lipids	(mg/dl)	1 0	203.	1	_	~~		. ~	. <	7 ~	7 C	· C	α) —	4 W	ט כ	\neg) 4	• <	ר כ	218.		211.4	
		Number		- - -	4 m	4	· ທ		o).	ן ר	7 7 7	# Ľ) t	7 7	70	A C	07	ر ا ا	77	0 0 0	30	1 1 1 1 1 1 1	Mean	S.D.
	1		. İ																				1		

CONTINUED(2) 7 - 1 - M1APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

wdd 0 Level and Sex:

Male

Animals Killed on Schedule (104 Week)

ਂ ਲ	1 6 6	7 3 33 33	~	~~	~	~	· ~	\sim	\sim	\neg	\sim	\cdot	חת	יח ו	יו ר	יז ר) [']		, (,)) 1				
																					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																								
																								1	
C1	(mEq/1) 	102.	102.	102.	103.	105.	102.	100.	102.	100.	102.	104.	102.	104.	100.	104.	101.	. 66	101.	101.	101.		20.		
Ж	(mEq/1) 								•		•		•	•		4.7	•		•	•					
Na	(mEq/1)		143.									10	~	~	<+	142.	<₹	< ₹	⋖	v	<□	1 4	144.U		
Animal	Number	! ! ! ! ! ! !	2	m	4	5	Ç	9	11	12	14	15	17	18	19	20	23	25	26	28	30		Mean	S.D.	

APPENDIX 7-1-M

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex :

10 ppm Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

130.80 Tri- Free Fatty glyceride Acid 649.3 20 $(\mu \, \mathrm{Eq}/1)$ 421. 515. 851. 755. 1026. 720. 637. 621. 559. 658. 541. 673. 608 583 657 166.6 20 40.52 (mg/dl) 146. 218. 218. 1129. 1150. 1171. 1171. 1186. 208. 1200. 2200. Cholesterol 172.0 20 54.59 (mg/dl) Total 249. 152. 211. 122. 203. 148. 133. 138. 126. 221. 195. 145 (mIU/ml) 150.4 20 37.19 ALP 79. 127. 135. 138. 176. 175. 139. 138. 170. 157. 144. 167. 140 (mIU/ml) 2,2125 3.560 G-GTP 3.41 3.67 0.52 6.29 3.67 3.93 0.61 5.68 5.94 0.79 (mIU/ml) 192.39 553.8 LDH 160. 862. 540. 532. 571. 497. 274. 538. 749. 770. 676. 508. 516. 336. 710. 789. 708. (mIU/ml) 29. 28. GPT24. 28. 30. 28. 31. 27. 28. (mIU/ml) 59.5 20 9.76 GOT 69. 46. 48, Number Animal Mean N S.D.

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APPENDIX 7-1-M2 CONTINUED(1)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex: 10 ppm Male

Animals Killed on Schedule (104 Week)

	()																				ىعىد				<u> </u>		house	.2	P	1
	(Day	733	1.00	133	733	733	713		7.50	133	733	733	73.4	73.4		407	/34	73 4	73.4	73.4	73.4	73.4	73.5	1 - 1	73.7	1 1 1				
Inorganıc Phosphate	(mg/dl)	~ ~	•	٠	٠		•	•	•	٠	•	•) L * * (*	•	•	•	•	•		4.6	,	•	٠	•			20	0.334	
Calcium	(mg/dl)				-		•	•	·	0	0		. 0	ν c	ν·	•	ص		o	· c	· C		•	•	o.			20	0.492	
Urea Nitrogen	(mg/dl)		T2.	19.	17.	• • • •	• FO	15.	12.	13.		12.	• 14 -	10.	٠ ک	18.	14.	12.	22.		- - -	, , , ,		13.	10.			20	3.04	
A/G		!	0	ς.	י ו	י נ	7	സ	٦.	2		• •	٦,	7.18	4.	┌;	ω	ц,	, (•	10	٠,٠	•	٦.		i		20		
Albumin	(g/dl)	!	0	α	. ר	` `	7	2	2	,	• 1 c	• (7	2.96	⊣.	7	Ľ	. ~	າ c		•	، ر	•	٦,	0	•		.00		- -
Total Protein	(g/dl)	1	0	-	٠,	، و	σ.	2	α	0	, , ,	٠,	┥.	5.46	r,	2	וני) և •		וע		٠.	٠.	ω		•	1 0 B 7			
Glucose	(mg/dl)		10	٠.	n	-	~	\sim) C	\supset	\sim	⋖	152.	æ		- <	4 6	n l	(2	\circ	(T)	4	v	Jα	• 00	1 0	7.047) C	
 Phospho- lipids	_	. 1	~	٠.		-+	\sim	٠.	٠,	-10	\mathbf{r}	_	\sim	228.) <	#C	D 0	27 (σ	1	ц,	1 -	·u	Jι	_	1 .	245.I	> (
Animal	Number		_	~ .	$\overline{}$	\sim	_	\cdot	~ (¬ ,		$\overline{}$	_	116	-	н с	V (\sim		$\mathcal{C}_{\mathcal{A}}$	()	()	()	v	') ((*)		Mean	Z	S.D.
i		1																									1			

APPENDIX 7-1-M2 CONTINUED(2)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex: 10 ppm Male

Animals Killed on Schedule (104 Week)

(Day)	733 733 733 733 733 733 734 734 734 734	! ! ! ! !
C1 (mEq/1)	102. 104. 104. 103. 102. 102. 103. 103. 100. 100. 100. 103.	101.4
K (mEq/1)	ω 4 4 4 ω ω 4 4 4 ω ω 4 ω 4ο ο ω τ ω 4 ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο ο	4.01 20 0.269
Na (mEq/1)	114444 114444 114444 114444 11444 11443 11443 11443	142.6 20 3.52
Animal Number	102 103 104 104 104 111 112 112 112 112 113 113 113 113	Mean N S.D.

7 - 1 - M3APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

100 ppm Male Level and Sex : Animals Killed on Schedule (104 Week)

	(Day)
Free Fatty Acid	(wEq/1)
Tri- Free Fa ol glyceride Acid	(mg/dl)
Total 1 Cholesterol g	(mg/dl)
ALP	(mIU/ml)
G-GTP	(mIU/m1)
ГЪН	(mIU/ml)
GPT	(mIU/ml)
GOT	Number (mIU/ml) (mIU/ml)
Animal	Number

	1																				!	,	1 %	29,
	(Day)	733	\sim	\sim	\sim	\sim	\sim	\sim	ന	ന	ന	m	m	$^{\circ}$	α	734	\sim	(,,	-	·, ,	(,, 1			1
Free Fatty Acid	(µEq/1)	~	~	10	\sim 1	\sim 1	\sim	<#	10		\sim	0	ഗ	<₩	σ	659.	\sim	σ	\circ	_	-	686.0	0	117.36
Tri- glyceride	(mg/dl)	-		/	· —	m	\sim	-	<	\sim	~	\sim	ω	3	S	131.	\sim	∞	\sim	\circ	Π)		20	65.87
Total Cholesterol	(mg/dl)	1 -	1 -	ω	4	·	123.	9	7	æ	4	マヤ	9	N	4	136.	マ	α	~	വ	m		20	
ALP ((mIU/ml)	1 ~	364	∞	66	V C	\sim	1	1	ω	6	' W	9	1	സ	161.	9	-	4	.69	179.		20	
G-GTP	(mIU/ml)	10	, α	. 0	.0		10	٠,	. 0	9	, –	. 0	,		. ~	11.27	ω,	C	7.	1-	6.64	4.420	1	3.1269
LDH	(mIU/ml)	1 1	~ c	V -	4 <	4 1	< C	ט נכ) ~		٠ <	א ע) 4	٠ ٢	٠~	360.	·	0	\circ	_	238.		2	
GPT	(mIU/ml)	0	. LO.		. 29		24.		• • • • • •	. 7 %	• • • •	, , ,	, CC	. 70	• PC	. [0	47	, ("	34.	41	29.		·	11.38
GOT	(mIU/ml)		4,7	263.	00 r	. 14.	٠/٥		.00	. / 0	. 70	0 4	о п 4 п	, ר טיר	106	· 00 H	• 0	• 00			 20 C	i		46.89
Animal	Number	1 (\neg	\supset 0	\sim	\supset	\supset 0	$\supset r$	-1 -	- ا	⊣ -	-1 -	-1 -	- I	⊣ г		٦.	⊣ ი	4 C	4 C	226		Mean	S.D.
		.																				i		

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APPENDIX 7-1-M3 CONTINUED(1)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	733	\sim	\sim	α	\sim	\sim	\sim	\sim	\sim	~) (T	7 ~	\neg	7 (\neg	\sim 0	$\overline{}$	\sim	\sim	\sim	\sim				1 1 1 1 1	
Inorganic Phosphate	(mg/dl)	4.4	٠	3.8	•	4.2	4.3	4.8	4.2	•	•	7. 7	•	•	•	•	•	٠		3.9	٠	•		4.25	, ,	· i	
Calcium	(mg/dl)			9		6	C		· _	•)	•	•	-i c	-	· .	رح •	•	Ö	ö	•	0	9		10.38	•	0.48T	
Urea Nitrogen	(mg/dl)	15.	16.	17.	13.	13.	7.2	4 L	• • • •	• 7 C	• 0 7 F	T C	13.	. 19.	9T	14.			16.			12.		14.5	0	2.24	
A/G		17	. 0	, ~		1 —		•	•	4, 0	· .	٠,	⊣.	.2	7	٠,	-	۲.	1.11	2	, –	•	• 1		20	0.1243	
Albumin	(g/dl)	1	•	•	י יי		• 1 c	ب	٠,١	ດຸ	ئ ا	. 7	٠ ک	• 3	٣,	.2	0		3.14	, ~	, (•	•	3.283	20	0.2178	
Total Protein	(g/dl)	10	, 0	9 0	•		4 (٠, ر	7.	0.		4.	.7	0.	0	7	۷	•	5,00	•	•	ν, α	•		20	0.3494	
Glucose	(mg/dl)	10	7 -	-1 <	> <	100.) (2	^	グ	4	ď	9	2	S	4	' '	> <	175.) (o '	9	147.		20.5		
Phospho- lipids	(mg/dl)	. 1 6	~ c	7	\mathbf{r}	$\supset \Gamma$	`	က	₽	\sim	S	9	0		1	$\cdot \subset$	o a	0 0	201.	~ (7	ഗ	2	•	20.	48.67	•
Animal	Number		\neg	-	\neg			\circ	_	$\overline{}$	$\overline{}$	\neg	_	4	4 ~	4 ~		٦,	2 T 9	V	\sim	2	\sim	1	Меап		;
		•																									

CONTINUED(2) 7 - 1 - M3APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex

100 ppm

Experimental No. 82014 Animals Killed on Schedule (104 Week)

1

APPENDIX 7-1-M4

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	7333 7333 7333 7334 734 734 734 735 735	
Free Fatty Acid	(µEq/1)		888
Tri- glyceride	(mg/dl)		20.55.
Total Cholesterol	(mg/dl)	100440401300000000000000000000000000000	140.4 20 40.07
ALP	(mIU/ml)	2322 2322 3322 3322 332 302 302 303 303	162.6 20 35.82
	(mIU/ml)	7.00 7.00	3.907 20 3.3040
	(mIU/ml)	2000 2000	558.8 20 194.38
GPT	(mIU/ml)	24. 30. 321. 18. 224. 22. 23. 34.	27.1 20 8.66
	(mIU/ml)	54. 522. 523. 524. 54. 55. 55. 55. 71.	59.8 20 10.76
Animal	Number	301 302 302 303 304 304 308 306 316 317 317 320 320 330 331 333	Mean N S.D.

APPENDIX 7-1-M4 CONTINUED(1)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

tein Albumin A/G Nitrogen Calcium Phosphate d1) (g/d1) (mg/d1) (mg/d1) (Day) 29 2.97 1.28 16. 9.9 4.4 733 29 2.97 1.28 16. 9.9 4.4 733 08 3.14 1.07 15. 10.6 4.0 733 08 3.20 0.93 14. 9.9 4.5 733 64 2.72 0.93 14. 10.5 3.7 733 65 2.94 1.15 15. 10.0 5.0 733 66 2.94 1.08 1.17 14. 11.3 4.6 734 40 2.63 1.30 1.14 13. 10.4 3.8 734 99 3.19 1.14 13. 10.4 4.5 734 10 3.38 1.27 15. 10.1 4.7 734 11 3.38 1.27 15. 10.1 4.7 734 11 3.38 1.27 15. 10.1 4.7 734 12 10.1 4.0 735 98 3.22 1.17 12. 10.1 4.0 735 98 3.22 20 20 20 2.0 20 20 20 20 3418 0.2505 0.1324 2.13 0.388 0.456	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
(1) (g/d1) (mg/d1) (mg/d1) (mg/d1) (Day) 2.97	spho- To ids Glucose Pro
3.14 1.28 16. 9.9 4.4 733 3.14 1.07 15. 10.6 4.0 733 3.14 1.38 12. 10.2 3.7 733 4 2.72 0.93 14. 9.9 4.5 733 7 3.14 1.15 15. 10.0 5.0 733 7 3.52 1.30 13. 11.3 4.6 733 6 2.94 1.08 12. 9.9 4.4 733 6 2.94 1.08 12. 9.9 4.4 733 6 2.94 1.08 12. 11.3 4.6 734 9 3.53 1.14 13. 10.4 4.6 734 9 3.19 1.14 13. 10.4 4.0 734 9 3.33 1.17 12. 9.9 4.1 734 1 3.38 1.24 12. 10.1 4.4 734 1 3.38 1.24 12. 10.1 4.5 734 1 3.38 1.24 12. 10.1 4.5 734 1 3.20 2.0 2.0<	mg/dl) (mq/dl) (g,
3.14 1.07 15. 10.6 4.0 733 3.346 1.38 12. 10.5 3.5 733 4.2.72 0.93 14. 10.9 4.5 733 7. 3.14 1.15 15. 10.0 5.0 733 7. 3.32 1.30 1.17 12. 9.9 4.5 733 7. 3.60 1.17 12. 9.9 4.5 733 7. 3.60 1.17 12. 9.9 4.5 734 7. 3.19 1.30 15. 10.5 4.0 734 7. 3.28 1.27 12. 9.9 3.3 734 7. 3.38 1.24 1.27 12. 9.9 7.4 7.34 7. 3.28 1.24 1.2 10.1 5.0 734 7. 3.28 1.24 1.2 10.1 5.0 734 7. 3.28 1.24 1.2 10.1 5.0 734 7. 3.28 1.24 1.2 10.1 4.0 735 7. 3.20 2.0 20 20 20 20 7. 3.20 2.0 20 20 20 7. 3.21 1.17 14.0 10.32 4.24 7. 3.22 2.0 20 7. 3.22 2.0 20 7. 3.23 1.174 14.0 10.32 4.24 7. 3.29 2.0 20 7. 3.29 2.0 20 7. 3.29 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0	157
3.46 1.38 12. 10.2 3.5 /33 4 2.72 0.93 14. 10.5 3.7 733 7 3.14 1.15 15. 10.0 5.0 733 7 3.32 1.15 13. 10.3 4.4 733 8 2.94 1.08 12. 9.9 4.6 733 9 2.63 0.95 21. 11.1 4.5 734 9 3.53 1.30 15. 10.5 4.0 734 9 3.42 1.35 15. 10.4 4.1 734 9 3.34 1.27 12. 9.9 3.3 734 9 3.38 1.24 12. 10.7 4.7 734 1 3.38 1.27 12. 10.1 4.4 7.34 1 3.34 1.09 12. 10.1 4.4 7.34 1 3.28 1.32 1.1 4.0 7.34 1 3.22 1.1 1.0 4.0 7.34 1 3.20 1.3 1.2 10.1 4.0 7.34 1 3.22 1.1 1.2<	145.
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7 3.14 1.15 15. 10.0 5.0 733 7 3.32 1.30 13. 10.3 4.4 733 8 2.94 1.08 12. 9.9 4.6 734 9 2.63 0.95 21. 11.1 4.6 734 4 3.53 1.30 15. 10.4 3.8 734 9 3.19 1.34 15. 10.4 4.1 734 4 3.38 1.27 12. 9.9 3.3 734 8 3.33 1.24 12. 10.1 4.4 734 7 3.28 1.32 10.1 4.4 734 7 3.34 1.09 12. 10.1 4.5 734 8 3.22 1.13 12. 10.1 4.5 734 8 3.22 1.13 12. 10.1 4.5 734 8 3.22 1.13 15. 10.2 4.0 735 8 3.22 1.13 14.0 10.3 4.24 86 3.22 2.0 2.0 2.0 2.0 20 2.0 2.13 0.388	128. 5.
7 3.32 1.30 13. 10.3 4.6 733 7 3.60 1.17 14. 11.3 4.6 734 8 2.94 1.08 12. 9.9 4.5 734 9 2.63 0.95 21. 11.1 4.5 734 9 3.19 1.30 15. 10.4 4.1 734 9 3.34 1.27 12. 9.9 3.3 734 8 3.33 1.17 15. 10.7 4.4 734 9 3.38 1.24 12. 10.1 4.4 734 1 3.34 1.09 12. 10.1 4.4 734 1 3.32 1.24 12. 10.1 4.5 734 4 3.22 1.32 12. 10.1 4.5 734 5 3.22 1.174 14.0 10.3 4.24 86 3.223 1.174 14.0 10.32 20 20 20 20 20 20 20 20 20 20 20 2.13 0.388 0.456	132. 5.
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3.33 1.17 15. 10.7 4.7 734 734 3.38 1.24 12. 10.1 4.4 734 734 3.28 1.24 13. 10.1 5.0 734 734 735 3.22 0.97 12. 10.4 4.5 735 735 3.16 1.13 15. 10.2 4.0 735 4.0 735 6 3.223 1.174 14.0 10.32 4.24 2.13 0.388 0.456	132. 6.0
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3.28 1.32 13. 10.1 3.34 1.09 12. 10.4 3.22 0.97 12. 10.1 3.16 1.13 15. 10.2 4.24 735 735 735 735 736 735 737 737 735 735 735 735 735	71 156 6.1
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$\begin{array}{cccccccccccccccccccccccccccccccccccc$	74. 126. 6.4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	129 129 6.5
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	82. 5.9
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18 0.2505 0.1324 2.13 0.388 0.456	7.4
	8.99 0.

APPENDIX 7-1-M4 CONTINUED(2)

1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Mary range processing range

Male

1000 ppm

Level and Sex

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day) 100.8 20 (mEq/1)102. 103. 102. 102. 100. 100. 98. 97. 103. 103. 97. 0.282 (mEq/1) 4.15 20 4.4 4.4 3.7 142.1 20 2.31 (mEq/1) 140. 142. 142. 144. 142. 145. 141. 145. 145. 140. 144. 139 138 140 138 Na Animal Number Mean z

APPENDIX 7-1-F]

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex: 0 ppm

Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day) Tri- Free Fatty glyceride Acid 212.21 923.0 20 (WEG/1) 836. 613. 957. 1319. 106. 874. 794. 755. 1198. 1455. 907. 687. 669 981. (mg/dl) 158.22 231.5 254. 186. 223. 680. 86. 401. 136. 1888. 121. 271. 206. 123. 147. 185. 181. 159, Cholesterol (mg/dl) 42.74 Total 144.9 151. 91. 185. 280. 137. 152. 128. 132. 146. 127. 149. 123. 129. 132. 209. 160. 151. 81. (mIU/ml) 35.99 ALP 182. 183. 107. 133. 195. 176. 181. 158. 186. 140 195 169 158 (mIU/ml) 0.7838 1.676 G-GTP 1.88 2.47 2.84 0.95 1.41 1.65 1.56 3.25 1.98 0.97 2.08 1.51 2.11 0.15 2.71 0.68 1.07 1.87 20 mIU/ml) 129.61 349.3 176 3399 3399 3385 1386 1386 176 LDH 551. 565. 287. 260. 20 mIU/ml) 20 15.21 41.7 GPT mIU/ml) 70.9 20 21.30 GOT 62. 116. 63. 63. 61. 103. 68. 50. 59. 73. 75. 65. 80 Number Anima1 1002 1003 1008 1009 1010 1013 1016 1018 1019 1020 1021 1023 1023 1025 1029 Mean 030 S.D.

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APPENDIX 7-1-F1 CONTINUED(1)

1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 0 ppm Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

 (Dav)		740		44				* *	+ +	-44	-+ <	+ +	<++ €	44 <	-++ <	-+ -	* <	r <	r 9		2r I				
Inorganic Phosphate	7 1	დ a ო <									٠		•	•	•	•	•	•	•	•	• ;		20	0.780	
Calcium (mg/dl)	1 3	11.0	•	(•	•	~ <	• > c	•	0	·.	· -	10.2	•	· •	· .			-i c	· .	•	10.95	20	0.817	
Urea Nitrogen		17.	14°	4.	• 6 T	13.	, Te	14.	14.	15.	17.	18.	20.	T8.	19	17.	14.	13.	T.	15.	11.		20	2.46	
A/G	1	1.52	υ.	റ	۲.		٠,	9.	7.	υ.	5	9.	4	4.	4.	٣.	0		u).	7.	ω	7.481		0.2243	
i B \	(g/al) 	3.71	3.78	4.06	4.09	4.55	4.08	4.10	3.63	3.90	4.00	4.18	3.85	3.92	3.84	3.62	4.81	3.82	4.32	3.77	1.76	•	20.		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
100	(g/dl) 	۲	.2	7.	9.	5	0.	വ	.2	7	ഹ	7.	09.9	5	5	ς,	7	r,	0.	T.	1		200		
uc,	(mg/dl)	10	\sim 1	10	_	_	\sim	<₩	T	ும	വ		167.	8	~	വ	0	T()	A	7	' (7)	1 0		28.70	
Phospho- lipids	(mg/dl)	I LO	~	က	ന	~	0	· (10	ı v	· -	10	9	_		\sim	\sim	\circ	0	΄ ~	188.	1		07 67 67	•
	Number	1 5						1 0	10	1 -	1 -	7 0	20	0.0		$\frac{1}{2}$	$\frac{1}{2}$			2 0	1031	1	Mean	Z C	. U.

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CONTINUED(2) 7-1-F1 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Female шdd Level and Sex Animals Killed on Schedule (104 Week)

Experimental No. 82014

(Day) 740 740 740 740 740 741 741 741 741 741 742 (mEq/1)102. 103. 102. 99. 102. 105. 105. 103. 103. C10.852 (mEq/1) 3.97 142.9 20 1.74 mEq/1) 11493. 114403. 114423. 11445. 11445. 141. 147. 144. 141. 142. Number Animal 1001 10002 10003 10008 10010 1010 1010 10020 10020 10020 10020 10020 10020 10020 10020 Mean N 1030 S.D.

7-1-F2 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

10 ppm Level and Sex:

Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

	(Day)	. <	# 4	-11	<+	~	4 <	-11	<⁺	<#	♥	_	* •	♂	4	4	_	* *	び	741	ಶ	4	∀	۲ <	ታ '	4					!!!!!!!!!!!
Free Fatty Acid	(µEq/1)	1 1	_	~	15	10		α	<₩	겁	72	0	ν.	04	σ	\sim) L	o,	4	1026.	\sim	2	Ľ	י טע	V 1	⊣.		933.7		227.48	
Tri- glyceride	(mg/dl)		\sim			۔ ر	٠ د	۲۲	1	\sim	◁	• 0	V	\circ	Н	\sim	> (ざ	ന	128.	O	ľ	, (\circ	N	9		227.2		92.17	
Total Cholesterol	(mg/dl)	i i	m	_	~	٠,	⊣ `,	\mathbf{H}	~	~	. ~) (\supset	\sim	0	-	٠ ١	ヸ	\sim	133.	C	V) C	2	\sim	9	١.			30.16	
ALP	(mIU/ml)	i	_	1	٠ لــ	٦ ($\overline{}$	S	\sim	1	٠ <	* •	ď	ω	Ľ) <	* 1	-	5	147.		~ C) L	Ω	9	4	٠		20	71.26	
G-GTP	(mIU/ml)	1	1.17	2 8 5		7 7 7	3.18	1.54	08.0	1.04	* C	60.0	1.49	2.84	77	- C	T.30	1,39	1,23	1 59) - -	٠, ٥	•	æ :	1.03	r	1		000		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	(mIU/ml)		7	· C	0	383.	σ	323.	1	٠,	7 -	-	0	σ	• V C V	۷ (J	$^{\circ}$	4	321	1 (9	>	9	8	α)		C		1 1
GPT	(mIU/ml)		45.		• • • •	43.	34.	5.5	• ((. 70	. 07	22.	50.	011			38.	38.	33	• •	• † !	56.	39.	35.	7 7	• • α	.00		• 7 c	20.23	• 1
GOT	(mIU/ml)		63	•	٠٧.	64.	56.	7.2	•	G L	.76	62.	75	. 00. [N C	86.	55.	52	•	• 100	• / /	110.	55.	85,	, , ,	• 20	89.	,		20	
	Number		0) C	7	10	7) C	9 6	7	0	10	_	4 r 4 r	-	=	겁		4 -	7 7 7 7	-	12	12	12	1 c	7,7	13	1	Mean	z c	o.u.

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CONTINUED(1) 7-1-F2 APPENDIX

2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Animals Killed on Schedule (104 Week)

Female

10 ppm

Level and Sex:

)ay)		139
Inorganic Phosphate (mg/dl) (I	44KKW4K44KA4KKKKAKK 60KU8CL8CKOOOKOOCOO	3.84 20 0.535
Calcium (mg/dl)	110 110 110 110 110 110 110 110 110 110	11.35 20 0.868
Urea Nitrogen (mg/dl)	24 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	14.4 20 1.90
A/G	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	1.642 20 0.2384
Albumin (g/dl)	0.64 6.64 6.44 6.44 6.46 6.66 6.66 6.66	4.204 20 0.4927
Total Protein (g/dl)	6 20 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	20 20
Glucose (mg/dl)	1129 129 129 129 120 120 120 130 130 130 130 130 130 130 130 130 13	
Phospho- lipids (mg/dl)	291. 203. 218. 203. 207. 324. 324. 231. 245. 223. 224. 286. 304.	254.3 20 48.73
Animal Number	1101 1102 1103 1104 1104 1108 11109 11116 11118 11123 1128 1128	Mean N S.D.

APPENDIX 7-1-F2 CONTINUED(2)

2/4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 10 ppm Female

Animals Killed on Schedule (104 Week)

		(Day)	740	740	740	740	740	740	740	740	741	741	741	747	747	TF/	747	741	741	742	742					
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																								ı	5 	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Cl	(mEq/1)	93.	103.	. 86	102.	101.	900	99.	• 66	97.	100.	95.	101.	98.	100.	. 86	102.	• 666 1	. 197	102.	102.	: _	0 (2.5	
	М	(mEq/1)			3.7					•				•				•	•	•	•	•			0.483	
1 1 1 1 1 1 1 1 1	Na	(mEq/1)	142.	143.	143.	141.	143.	140.	142.	142.	143.	143.	144.	144.	141.	140.	145.	145.	144.	143.	144.	142.		20	1.45	
	Animal	Number	1101	1102	1103	1104	1106	1107	1108	1109	1111	1113	1114	1115	1116	1117	1118	1123	1125	1126	1128	1131	Mean	Z	S.D.	

APPENDIX 7-1-F3

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm Female

Animals Killed on Schedule (104 Week)

	1				! ! ! ! ! ! ! !	Total	Tri-	Free Fatty	
GPT GPT				אווים ויי		23 CCI	77.007.	3	(Tie(1)
(mIU/ml) (mIU/ml) (mIU/ml)	U/ml) (mIU,		1	(TW/NTW)	(TW/OTW)	(mg/ar)	(mg/ar)	 / T /bg w/	(Day)
0. 55. 20	5. 20	0			7	7	œ	518.	740
1. 30. 33	0. 33	\sim		•	ω	2	\sim	\sim	₹ '
33, 29	3. 29	6		ς,	7	2	3	2	₫,
2. 60. 42	0. 42	2		0.	0	~ 1`	9	9	₫,
4. 45. 37	5. 37	7		4.	\sim	-	9	Ω.	₫ .
32. 46	2. 46	9		1.17	4	\sim	∞	∞	4
3. 34. 37	4. 37	7		9	0	9	\vdash	4	4.
6. 56. 60	6. 60	0		•	\vdash	-	\sim	_	₫.
5. 50. 43	0. 43	\sim		•	9	9	3	S	マ
38. 39	8. 39	6		9.	ω	3	\vdash	87	4
32. 79. 32	9. 32	2		9.	α	S	9	9	4.
3, 69, 34	9. 34	4		۲.	4	\sim	-	∞	4.
65. 51. 25	1. 25	5		0	2	2		ω,	4.
34. 48. 21	8. 21	$\overline{}$		٦.	9	-	\dashv	9	4
4. 66. 32	6. 32	2		3.14	202.	114.	144.	<u>,</u>	4.
81. 25. 14	5. 14	4		0.	0	φ	0	4	4
1. 45. 23	5. 23	\sim		.2	Н	ω	2	96	4
8. 45. 22	5, 22	\sim		. 2	2	S	0	0	4.
3. 36. 37	6. 37	7		•	4	137.	Н	21	4
75. 50. 479.	0. 47	7		0.30	9	111.	1	U I	4 I
0 8 47 4 34	7.4 340.	40.							
20 20	0 20	20		20	20	20	20		
.50 14.13 11	4.13 111.0	11.0		0.8638					

CONTINUED(1)
7 - 1 - F3
APPENDIX

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18

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm Female

Animals Killed on Schedule (104 Week)

									1 1 1 1 1 1
12	0.847	0.363	2.32	0.1916	0.2571	0.3998			S.D.
<u> </u>	0	0	0		20	20	20	20	
-	3,83	10.73	15.0	1.542					ווווע שפט
1 t	• !	0	13.	4	• 4	∞.	4	9	\mathcal{C}
. <	•	• 0	• C -	Ω·	9	ي.	_	S	\sim
7	•		Tr	., L	٠ ١	7	-	7	\sim
r <	٠	> -	, T.	٠, ر	ي.	φ,	4	-	\sim
₹ 5	•	-i c		5	4.	.7	2	\vdash	2
ਹਾ •	4.5	<u>.</u>	15.	. 4	•	ഹ	9	9	7
₹,	•	· .	Τ.,	5	9	0.	4	\sim	2
₹,	•	· •	17.		•		Ω	\sim	2
母・	•		17.	. 7	•	0.	9	\sim	\vdash
∀' '	3.2		18.	1.10	3.62	6.92	121.	261.	217
ぜょ	٠	· 0	15	4.	•	٠,	4	Н	2
゚	•	0	14.	6.	•	0.	0	ω	1214
゚	٠	i	10.	9.	•	٣,	4	0	$\frac{1}{2}$
すっ	•	· .	13.	. 7	•	.5	$\overline{}$	Н	-
4,	•	0	14.	9.		0.	2	~	\neg
マ・	3.5	0	14.	9•	•	· 3	9	0	0
4	•	0	1,5.	9.	•	۲.	Ą	0	0
母 ⋅	٠	· ·	17.	.5	•	0.	9	4	0
母 ⋅	•	· 0	17.	. 7	•	.5	3	\sim	0
740	4.2	10.7	20.	•	•	9.	9	1	10
(Day)	(mg/dl)	(mg/dl)	(mg/dl)		(g/dl)	(g/dl)	(mg/dl)	(mg/dl)	umber
	Inorganic Phosphate	Calcium	Urea Nitrogen	A/G	Albumin	Total Protein	Glucose	 Phospho- lipids	 Animal
4	tal No. 8201	Experiment	IU4 Week)	Schedule (s Killed on	Animals			

CONTINUED(2) 7-1-F3APPENDIX

2/5

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Female 100 ppm Level and Sex:

Animals Killed on Schedule (104 Week)

Animal	Na	Ж	C1		
Number	(mEq/1)	(mEq/1)	(mEq/1)	(Åad)	
0	~11	3.4	101.		
	-	3.7	98.		
	-	•	101.		
0	~	3.5	103.		
20	<	3.4	102.		•
7	<	3.6	102.		
77	<₩	•	100.		
7	ಠ		97.		
2	₹	٠	986		
7	₹	•	102.		
2]	Q.	•	103.		
1219	143.	3.6	103.	747	
22	4	•	• 00 r		
22	ゼ	•	.001		
22	ぜ	•	. 70T		
22	4	•	. 00		
23	ゼ	•	90.		
23	142.	٠	100.		<u>~</u>
23	4	•	101.		~1
23	143.	•	10/		1
	ic				
Mean	20		20		1
S.D.	1.33	0.262	2.70		XI.
				3	3

APPENDIX 7-1-F4

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Female

Animals Killed on Schedule (104 Week)

			144
	₫ 1	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
Free Fatty Acid	(µEq/1)	761. 865. 865. 1101. 101. 858. 537. 651. 670. 688. 696. 896.	777.4 20 156.75
Tri- glyceride	(mg/dl)	234. 191. 274. 322. 112. 1146. 1145. 215.	178.1 20 56.59
Total Cholesterol	(mg/dl)	127. 127. 127. 108. 108. 103. 114. 135.	130.2 20 28.09
ALP	(mIU/ml)	1661. 184. 135. 135. 193. 193. 197. 114. 129.	168.5 20 40.15
	(mIU/ml)	1.48 1.19 1.19 1.19 1.19 1.19 1.19 1.19 1.1	2.057 20 1.5086
LDH	(mIU/ml)	590. 336. 426. 160. 160. 184. 262. 282. 381. 170. 311.	314.0 20. 131.60
GPT	(mIU/ml)	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	46.8 20 16.25
GOT	(mIU/ml)	64. 55. 73. 73. 73. 73. 73. 122. 132. 125. 63. 63.	80.2 20 37.38
Animal	Number	1301 1301 1304 1304 1310 1314 1321 1322 1323 1324 1324 1331 1331	Mean N S.D.

APPENDIX 7-1-F4 CONTINUED(1)

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Female

Animals Killed on Schedule (104 Week)

Experimental No. 82014

Day) 741 742 742 740 740 740 740 740 740 741 741 741 741 741 0.605 Inorganic Phosphate (mg/dl) 4.33 4.3 20 0.831 (mg/dl) Calcium 11.23 10.4 111.3 111.3 110.5 110.5 110.5 111.7 111.0 111.5 111.5 1.93 Nitrogen (mg/dl) 14.6 20 111. 116. 117. 115. 115. 115. Urea 13. 0.1720 1.587 1.71 1.65 1.75 1.75 1.22 1.22 1.52 1.52 1.52 1.41 1.49 1.73 1.34 1.45 0.3538 (g/dl) Albumin 4.039 3.52 4.01 3.93 3.81 4.54 3.93 3.39 3.78 3.51 4.20 4.11 4.24 4.49 3.98 4.32 0.5178 Protein 6.603 (g/dl) 6.12 6.12 7.14 6.12 7.03 6.26 6.26 6.26 6.96 6.95 7.65 Total 7.406.85 6.82 145.2 20 21.92 (mg/dl) Glucose 184. 155. 135. 171. 153. 151. 143. 149. 153. 162. 148. 146. 154. 150 228.3 20 41.04 (mg/dl) Phospho-192. 227. 285. 227. 170. 190. lipids 267. 219. 292. 208. 182. 207. 265. 176. Number Animal Mean 1324 1326 1327 S.D. 1320 1321 1322 1323 1330 1310 1313 1314 1316 1317 303 1304 1306 1307 1331 1332 z

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CONTINUED(2) 7-1-F4 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Female 1000 ppm Level and Sex:

Experimental No. 82014 Animals Killed on Schedule (104 Week)

		~ 1	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	ਰਾ ਦਾ ਦਾ ਦਾ ।	1 1 1 1 1
				! 	! ! ! !
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1	-
			•	! ! ! ! !	1 1 1 1 1
		 	·		
	CI	(mEq/1)	1005. 1001. 1001. 1001. 1003. 1004. 1000.	101. 104. 99. 102.	101.2 20 1.99
	×	(mEq/1)	O W W W W W W W W W W W W W W W W W W W		3.53 19 0.338
	Na	(mEq/1)	114433. 124433. 12444433. 12464. 1386.	1 4 4 4 4 4 1	142.4 19 2.059
	Animal		1301 1301 1303 1304 1310 1310 1320 1321 1322	200000001	Mean N S.D.
i				1	

APPENDIX 7-2-M1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 0 ppm

Male

Animals Killed in Extremis

164.0 2.98 2.11 2.11 9.64 0.92 1.33 1.67 2.11 2.73	0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	388°. 174°. 333°.	1 2 2
11.33 2.98 2.11 9.64		888 880 227 246 467	980 980 970 980 980 980 980 980 980 980 980 980 98
2.08 2.98 2.11 0.92		80 27 46 45 70	4. 980 3. 27 46 4. 45
80 40 40		0 5 6	7. 27 3. 46 4. 45 8. 70
. 11		9	3. 46 4. 45 8. 70
.92		5	4. 45 8. 70
.92		0	8. 70
. 49		430.	430
9.49		416.	, 416
W		1039.	1039
ن		5944。	5944
.91		729。	729
		830 °	30
.44		2045。	. 2045
M		1005.	113. 1005.

W : Not measured because of shortage of serum.

CONTINUED(1)
7-2-M1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Male
mdd 0
••
Sex
and
Level

Animals Killed in Extremis

,																	
***		(Day)	2	ω	0	\vdash	435	7	\sim	2	S	α	\subset	> 1	\sim	0	347
	Inorganic Phosphate	(mg/dl)	4.7	4.5	4.7	5.0	•	•	•	•	ω, 8	•	•	• ′	•	•	5 . 4
	Calcium	(mg/dl)	11.1	•	•	•	16.9	٠	9	•	•	6	\	°	11.5	۰	11,1
	Urea Nitrogen	(mg/dl)	16.	17.	12.	19°	16.	15.	N	6	. ~	20	, , ,	°/7	13.	12.	15.
	A/G			0	0.63		1,1	2	0	, LC	1 40		•	ᅼ		ω,	1.47
	Albumin	(g/dl)	3.35	9		,	4.5		. α		0 7 ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° ° °	• 1 c	7 (ي	6	A	3.62
	Total Protein	(g/dl)	1 4	•	•	•		•	•	6	•	•	•	0	•	0	6.08
	Glucose	(mg/dl)	10		2 6	י ת י ת) [) r	7 0	7 0	ナ <	9 0	ζ	43	ر بر	2 0	184.
	Phospho- lipids	(mg/dl)	5.2	ט נ		7 6	, aac		7 0	プロ は ~	LU4.	0 0	2	142。	208) <u>-</u>	001
	Animal	Number	7	- α		۰ ۳ ۱ ۲	7 -) (7 C	7 7	17	22	34	43	0 7	\ C	2 2

W : Not measured because of shortage of serum.

				82014		(Day	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
				No. 82			
				nental			1 1 1 1 1
	D¥			Experimental	* ** ** ** ** ** ** ** ** ** ** ** ** *		
UED(2)	AL STUDY	-	<i>a</i> 3		19 19 19 19 19 19 19 19		1 1 1 1 1
CONTINUED (2	TOXICOLOGICAL RATS	-re	M L C				
MI		al Data	യാർ 0	emis	T. C	:	1 1 1 1 1 1
7-2-M1	INHALATION	Biochemical		in Extremi			
APPENDIX			Sex	11ed			1 1 1 1 1
APPE	INO	ndividual	vel and	nals Ki			:
	AND CARC	Ч	Lev	Anim	i I	(mEq/1)	103. 103. 103. 103. 104. 101.
	CHRONIC A				634 PG 635 PG 636	1)	6
	СНЕ					(mEq/1	Σ (
					ਾ ਜ ਜ	(mEq/1)	1488
	٠.			٠.,	i r I I I I	(mE	ਜਿਜੇਜੇ ਜਿਜੇਜੇਜੇਜੇਜੇਜੇਜੇ
				e	Animal	Number	1
					5	1	1 1

W : Not measured because of shortage of serum.

APPENDIX 7-2-M2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 10 ppm

Male

Animals Killed in Extremis

	(Day)		\mathbf{e}	_	\sim	ന	\vdash	\vdash	σ	715	4	3	$\overline{}$	9	9	ω
Free Fatty Acid	$(\mu \text{Eq}/1)$	768.	608	573.	971.	688.	925.	392.	643.	620°	\sim	~	224	230	2235.	04
Tri- glyceride /	(mg/dl)	136.	ဖ	50	4	ന	\sim	-	9	70°	α	60	~	5	Ŋ	4
Total Cholesterol	(mg/dl)	1 ~	169.	88	96.	3	212.	9	9	267。	14	ø	202.	S	240 。	7
ALP	(mIU/ml)	184.	49.	_	652.	73.	1.98.	56.	45.	72.	92.	68.	0	9	373.	9
G-GTP	(mIU/ml)	-	٤,	.2	2.37	.2	9	۰, ۸	W	æ	9.	.2	~	r,	3.6	5.
LDH	(mIU/mI)	180.	414,	710.	373.	864.	1046.	77	211.	002	.069	94.	776。	123。	1220。	737。
GPT	(mIU/ml)	12.	38°	30°	24 。	4 °	10.3.	°	41.	34 °	<u>ه</u>	.08	192.	17。	288.	_
GOT	(mIU/ml)	57.	.100.	93°	64.	75。	393.	250.	91.	77°	67.	107.	1085;	g	1006.	4
Animal	Number	0	\circ	\circ	-					123	\sim	\sim	\sim	\sim	\sim	0

 $\ensuremath{\mathsf{W}}$: Not measured because of shortage of serum.

CONTINUED(1) 7-2-M2 APPENDIX

3

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

10 ppm Level and Sex

Male

Animals Killed in Extremis

ı		(Day)	:	ဖ	1	$^{\circ}$	\sim	-	$\overline{}$	9	\vdash	4	\sim	613	9	9	069
- CAL - 140. 0601	Inorganic Phosphate	(mg/dl)	1 .									•	•	4.9	•		5.9
	Calcium	(mg/dl)	10.1	۰		۰	5	•	۰	2	•	9	7	11.5	2	υ	9.6
	Urea Nitrogen	(mg/dl)	18.	12.	14.	16.	30.	42.	41.	Μ				16°			
	A/G		١ ٣.	3	٠ 4	9.	8	6.	.5	9.	0.	. 7	6.	1.14	8	٠4	0.82
	Albumin	(g/dl)	.7	.7	۲,	9.	9•	٠.	۲,	9	e.	υ	9.	3.22	. 4	۲,	2.61
	Total Protein	(d/dl)	4.20	.5	3	٠ 4	. 7	9	9	ς.	.5	9.	۵.	. 6.04	ω,	6.	7.
the time that that the two the the the pas and	Glucose	(mq/dl)	130.	145	99	0	21	19	51	51	00	21	35	24.	9	. 88	107.
	Phospho- livids	(mg/dl)	190°	S	^	2 2	96	2	28	59	56	0	54	38	S	4	$\overline{}$
	Animal	Number	10	0	0	\vdash	\vdash	\vdash	\vdash		\sim	2	2	\sim	\sim	\sim	2

W : Not measured because of shortage of serum.

CONTINUED(2)
7-2-M2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 10 ppm

Male

Animals Killed in Extremis

	(Day)	_	10		\sim	\sim	_	519	7 -	⊸ •	4	η,	-	9	9	9 1
												•				tale stay gas een der der der der den den den den den den der den
		Į														
C]	凶	101	. 404	102	104.	109,	108	, 86 , 86	117,	100.	103。	101,	104	, 401 104	, DC-	97.
X	(mEq/1)		4. ບ ນົດ	 	. C.	υ L	3 6) (L	4.7	ຶຶຶ	4.6	3,7	· •	ָ פֿר	, L	
N N	(mEq/l)		146°	1.447°	146.	149		147.	172,	146.	144,	148.	3 7 1	7 -	ተተ ጉጥ	143.
Animal	Number	1 0	\neg	\sim	·	٠,	٠.	-	_	\sim	\sim		י ו	\neg \mathfrak{c}	חת	150

APPENDIX 7-2-M3

S.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm Male

Animals Killed in Extremis

	T.DH	<u>а</u> шт	AT,P	Total Cholesterol	Tri- qlyceride	Free Fatty Acid	
À	4)	•				
lIw)	(mIU/ml)	(mIU/ml)	7	(mg/dl)	(mg/dl)	(// Eq/1)	(Day)
37	373.	3.24	175.	126.	165.	799.	631
12	7.	0.18	. 99	46.	Μ	274.	463
216	.0	3.32	126.	75.	183.	540.	694
133.	3.	0.85	78.	128.	273。	362.	671
7	0.	1.12	21.	32.	53°	336.	540

W : Not measured because of shortage of serum.

7-2-M3 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS CONTINUED(1)

Individual Biochemical Data

Male 100 ppm Level and Sex :

Animals Killed in Extremis

1

~ ⁴	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Day)	631 463 694 671 540
Experimental No. 82014	Inorqanic Phosphate	~	6.3 4.5 6.1 9.6
Experimen	Calcium	(mg/dl)	9.6 9.3 10.7 15.2 2.1
	Urea Nitrogen	(mg/dl)	M 15.82.19.
	A/G		1.36 0.40 0.85 1.07
	Albumin	(g/dl)	2.43 1.17 2.65 3.34 0.49
** *** ** ** ** ** ** ** ** ** ** ** **	Total Protein	(g/dl)	4.22 4.11 5.76 1.12
	Glucose	(mq/dl)	128. W 143. 143.
** *** *** *** *** *** *** *** *** *** ***	Phospho- lipids	(mg/dl)	185. 105. 136. 130.
	Animal	Number	204 223 244 245

 $\ensuremath{\mathsf{W}}$: Not measured because of shortage of serum.

APPENDIX 7-2-M3 CC

CONTINUED(2)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm

Male

Animals Killed in Extremis

	(Day)	631	463	694	671	
C1	(mEq/1)	105.	106.	102.	100.	119.
×		5.6	3.6	4 , 1	4.3	3.9
		i				
RN	(mEq/1)	,	٠.			1

APPENDIX 7-2-M4

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CHRONIC AND CARCINOGENIC INHALATION, TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Male

Animals Killed in Extremis

Animal	GOT	GPT	ТОН	G-GTP	ALP	Total Cholesterol	Tri- glyceride	Fr	
Number	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mg/dl)	(mg/dl)	$(\mu \mathrm{Eq}/1)$	(Day)
0.7		460	M	39.85	327.	i	602.	2113.	069
309	79	y C	176.		40.	79.	102.	625.	574
, –	102			0	289.	75.	266.	911.	720
-	170°	. 26	250	7.9	204.	91.	78.	622.	559
318	~	, ° 10 °		11.02	72.	221.	1418.	1104.	610
\sim		38°	608°	1.3	56.	282.	108.	739.	711
	٧	198	1691	6	330,	133,	752.	1421.	588
\sim	10	, C	1331,	0.0	.09	126.	56.	90	687
\sim	6	83	1384.		273.	198.	646.	1222.	694
	9	94	ω		565.	102.	314.	999°	713
\sim	536.	305°	50	22.82	207.	177.	587.	1022.	629
(m)	03	81	52		75.	84.	78°	667。	712
349	15	50	539	8.65	287.	, G	245.	869°	729

W : Not measured because of shortage of serum.

7-2-M4 APPENDIX

CONTINUED(1)

is Sr

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Male 1000 ppm Level and Sex :

Animals Killed in Extremis

	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	00 00 00 00 00 00 00 00 00 00 00 00 00					Experimental No.	tal No. 82014	-4
Animal	Phospho- livids	Glucose	Total Protein	Albumin		Urea Nitrogen	Calcium	Inorganic Phosobate	
Number	(mq/dl)	(mg/dl)	(d/d1)	(d/dl)		(mg/dl)	(mg/dl)	(mg/dl)	(Day)
307	Ŋ	4.	6.93		0.93	74.	11.8		, 0
308	119.	142.	5.64	2.86	1.03	16.	10.0		, i –
311	ω	113,	9.	0.	0.67	127.	6.8	0.9	• (\
312	4	174.	9		5	17.	0		ເທ
318	α	_	.5	9.	-	24.		, ,	_
321	α	0	۲.	9.	0.	12.		4.9	<i>-</i>
322	7	\sim	.2	.2	9	61.	ω	•	α
323	9	ω	0.	0.	.5	24.	, ,	• ,	സ
325	9	117.	9		0.	26.	11, 4		\sim
329	7	2	0.	ω,	ς,	_	C	,	_
332	7	4	. 2	9	0	27.	, o	•	110
339	\sim	88°	9	7.	0.87	~	, ,	•	٠
34.9	7	121.	۲.	0.	9.	1	10.9	ຸກ	729
				,					1 1 1 1 1 1 1 1 1

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APPENDIX
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CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS CONTINUED(2)

Individual Biochemical Data

Male 1000 ppm Level and Sex :

Animals Killed in Extremis

	(Day)	! 0	0 L	- c	ν г) -	٦-	- 0	$\infty \alpha$	7 00	V ~	4	2	-	729
	•														
	<i>\$</i>														,
		-													
.															
C1	(mEq/1)	105,	101,	102.	. 96	98	, 86 6	102	100	108	100	。)))	LOY S	111,	102.
M	(mEq/l)	0	ကိ	0	۰	۰	0		, .	5.1		•	a	•	۰
æ N	(mEq/l)	145.	4	ひ	Δ	m	4	4	ಶ	145,	4	~	ナレ	Ω	♥ 1
Animal	Number	307	309	311	312	318	321	322	323	325	329	333	200	555 559	349

APPENDIX 7-2-F1

4 13-

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 0 ppm Female

Animals Killed in Extremis

n1) (mIU/ml) (mIU/ml) (mg/dl) (mg/dl) (784. 1.32 37. 244. 57. 141. 71. 125. 80. 172. 80. 88. 173. 188. 80. 172. 0.65 46. 88. 106. 216. 250. 0.94 68. 106. 216. 246. 250. 0.94 68. 100. 999. W 2.29. 97. 240. 999. W 324. 699. 130. 80. 158. W 324. 699. 130. 80. 158. W 324. 699. 130. 840. 256. 188. 292.	GOT		GPT	LDH		AT.D	Total	丁だ・一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一一	Free Fatty	
28. 784. 1.32 37. 244. 57. 126. 620. 0.90 37. 141. 71. 71. 128. 84. 71. 128. 84. 71. 128. 84. 89. 2.22 113. 118. 80. 80. 101. 405. 3.78 2.52. 178. 54. 54. 102. 798. 4.97 2.39. 162. 246. 195. W 4672. 80. 229. 97. 229. 97. 229. 97. 229. 158. W 135. 514. W 83.24. 69. 188. 292. 130. 159. W 5.76 2.58. 188. 292.	(mIU/ml)		(mIU/ml)	(mIU/ml)		(mIU/ml)	(mg/dl)		َ ز	(Day)
26. 620. 0.90 37. 141. 71. 1096 126. 725. 3.08 43. 173. 64. 832 13. 289. W 71. 112. 57. 1065 38. 489. 2.22 113. 118. 80. 1057 22. 172. 0.65 46. 88. 76. 1390 36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. W W 229. 97. 240. 938 226. 4672. W 31.57 672. 96. 232. 1360 135. 514. W 324. 69. 130. 351. 159. W 139. 84. 246. 1111 197. 258. 188. 292. 794.		!	iω	1 4	1 6	37				
126. 725. 3.08 43. 173. 64. 832 13. 289. W 71. 112. 57. 1065 38. 489. 2.22 113. 118. 80. 1057 22. 172. 0.65 46. 88. 76. 1390 36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. W W 229. 97. 240. 938 226. 207. W 31.57 672. 96. 232. 1360 226. 207. W 324. 69. 136. 159. W 139. 84. 246. 974 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794			9	· C	0	37.	* ~		0 0	⊣ c
13. 289. W 71. 112. 57. 1065 38. 489. 2.22 113. 118. 80. 1065 22. 172. 0.65 46. 88. 76. 1390 36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. W W 2.29. 97. 240. 938 226. 4672. 31.57 672. 96. 232. 1360 226. 4672. 80. 158. W 974 135. 514. W 139. 84. 246. 974 159. W 139. 84. 246. 974 159. W 139. 84. 246. 974 197. 1901. 5.76 258. 188. 292. 794			9	S	0	43.	73		, מ כ	ν L
38. 489. 2.22 113. 118. 80. 1057 22. 172. 0.65 46. 88. 76. 1390 36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. W 229. 97. 240. 938 226. 4672. 31.57 672. 96. 232. 1360 135. 514. W 324. 69. 130. 351 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794			$^{\circ}$	9		71.	20			40
22. 172. 0.65 46. 88. 76. 1390 36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. W 2.00 52. 100. 93. 226. 4672. 96. 240. 938 226. 4672. 96. 232. 1360. 135. 514. W 324. 69. 130. 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794	93.		∞	g	.2		8 7		0.5	J L
36. 250. 0.94 68. 106. 216. 766 101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 246. 990. 195. W 2.00 52. 100. 93. 226. 4672. 31.57 672. 96. 232. 1360. 135. 514. W 324. 69. 130. 351. 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794			2	\sim	9.	46	88		390	7
101. 405. 3.78 252. 178. 54. 1021 102. 798. 4.97 239. 162. 246. 990 195. 540. 2.00 52. 100. 99. 988 226. 4672. 31.57 672. 96. 232. 1360 226. 4672. W 80. 158. W 974 135. 514. W 324. 69. 130. 351 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794			9	0	6.	$_{\odot}$	90		766	4
102. 798. 4.97 239. 162. 246. 990 195. 540. 2.00 52. 100. 99. 988 226. W 229. 97. 240. 938 226. 4672. 96. 232. 1360. 207. W 80. 158. W 974 135. 514. W 324. 69. 130. 351 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794	49°		01	S	7.	52	78	Ŋ	021	' α
195.			02	∞	0.	39	62	46	990	-
226. 4672. 31.57 672. 96. 232. 1360 207. 4672. 96. 232. 1360 207. W 158. W 974 135. 514. W 324. 69. 130. 351 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794			195	540	0.	52	00	99	88	9
226. 4672. 31.57 672. 96. 232. 1360 207. W 158. W 974 135. 514. W 324. 69. 130. 351 159. W 139. 84. 246. 1111 197. 1901. 5.76 258. 188. 292. 794		丞		M	W	29	\sim	40	38	2
207° W 80. 158. W 974 135° 514° W 324. 69. 130. 351 159° W W 139. 84. 246. 1111 197° 1901. 5.76 258. 188. 292. 794	54°		226	672	31.	72	9	32	360	0
35. 514. W 324. 69. 130. 351 59. W 139. 84. 246. 1111 97. 1901. 5.76 258. 188. 292. 794		Z		07	W	$_{\alpha}$	58		974	7
59. W 139. 84. 246. 1111 97. 1901. 5.76 258. 188. 292. 794	98°		35	74	W	$^{\circ}$	9	30	51	989
97. 1901. 5.76 258. 188. 292. 79			59	M	M	\mathcal{C}	⋖	46	111	σ
			9	1901.	5.76	2	188.	9	79	733

W : Not measured because of shortage of serum.

W : Not measured because of shortage of serum.

APPENDIX /-Z-F1 CONTINUED(1) CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOI, IN F344 RATS	
APPENDIX 7-2-F1 CHRONIC AND CARCINOGENIC INHALATION OF METHANOT, IN F344	TOXICOLOGICAL
CHRONIC	AND CARCINOGENIC INHALATION OF METHANOL IN F344
	CHRONIC

Individual Biochemical Data

Level and Sex : 0 ppm

Female

Animals Killed in Extremis

		(Day)	616	<i>ا</i> لا	- 0	ז ע	ກໍ	7 5	3" C	o r	- 0	ν (7	0	_	æ	9	\sim
	Inorganic Phosphate	(mg/dl)	٠ ا	•		٥	•	0	4.2	٠	•	•	۰	۰	•	•	5,1	•
ı	Calcium	(mg/d1)	-	0	٠ ش		÷		•	÷		0	0		9		13.1	
	Urea Nitrogen	(mg/dl)		9	∞	1	8	α	17。	0	_	Н	α		M		°8 H	
	A/G		10.	ω,		۲.	9	4.	1.17	0.	-	6	Μ	٠	1.08	M	1.19	1.12
	Albumin	(d/q1)	1 2	9		0.	5	۵.	4,24	.5	4.	9	W	0	4,88		4.04	3.00
	Total Protein	(q/dl)	7.35	9	ω	5	۲.	9	$\overset{\circ}{\varpi}$	ω.	5	ᅼ	'n	0	4	0	7.43	9
	Glucose	(mq/dl)	86.	~	5	30	9	33	\mathcal{C}	13	24	25	47	77	00	0	132。	24
	Phospho- libids	(mg/dl)	335.	26	65	91	76	68	S	81	39	65	68	67	03	30	202.	90
	Animal	Number	100	00	00	00	01	01	02	02	03	03	03	0.4	0.4	0.4	1050	0.5
	v		•															

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2-F1 CON
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APPENDIX

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W.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex :

Animals Killed in Extremis

mdd 0

Female

	(Day)	-	269	ヽー	9	2	A.	Z,	∞	6-mary	0	N	\circ	6	8	(C)	C
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		! ! ! !															
IJ	(mEq/1)	95.	96°		103.	97.	94.	102.	102。	102。	94.	88	101.	93°	ත ත	102°	, O
X	(mEq/1)	3.2	3,7	۰	•		0	0	0	0			4.7			4.0	
		! !									Ŋ	M		M	M		
N N	(mEq/l)	143;	145.	4	143.	139.	139.	141.	142.	138.	M	W	146.	M	W	141.	
	Number	! !	•					~	~	~~		_	~		•	0	

W : Not measured because of shortage of serum.

APPENDIX 7-2-F2

W.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 10 ppm

Female

Animals Killed in Extremis

Animal	GOT	GPT	ГОН	G-GIP	ALP	Total Cholesterol	Tri- glyceride	Free Fatty Acid	
Number	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mIU/ml)	(mg/dl)	(mg/dl)	$(\mu \text{Eq}/1)$	(Day)
10	81.	22.	0	0.87	44.	1 5	76.] &	10
1112	64	16.	436.	1.00	33.	261.	. 69	50	S
TI:	09	220.	8	Μ	$_{\infty}$	8	4	15	9
12		. 89	812	7.	320.	18	24	51	2
7.7	7	59°	35	2,	7	91	62	91	ω
77	45	43°	∞	7.	\sim	42	$^{\circ}$	0	7
77	O 1	_	43	, <u>4</u>	\sim	01	സ	81	\sim
77,	55	び	72	. 7	40.	90	0	\vdash	\sim
77	T7	4	802	1.22	53.	7	75.	96	5
٦, ۲ ک (ı	_		۲.	283.	43	4	~	8
15	7.5	0	654	ᅼ	∞	$^{\circ}$	Ą	93	\vdash
T .	548.	0	1005.	4.	321,	0	9	$^{\circ}$	ω
T 7	0 1	80	247	ထ	0	51	0	01	2
T 4	056	0	002	5	\sim	$^{\circ}$	Ą	25	9
L 4	22	24	16	ئ	Ą	58	21	67	2
15		22.	73	2	37.	55	73.	05	3
15	106.		4	۲.	129.	5	67.	67	729

W : Not measured because of shortage of serum.

CONTINUED(1)
7-2-F2
APPENDIX

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 10 ppm

Female

Animals Killed in Extremis

		# # # # # # # # # # # # # # # # # # #				-	Experimental	tal No. 8201	Ÿ
Animal	Phospho- lipids	Glucose	Total Protein	Albumin	A/G	Urea Nitrogen	Calcium	Inorganic Phosphate	
Number	(mg/dl)	(mg/dl)	(g/dl)	(g/dl)		(mg/dl)	(mg/dl)	(mg/dl)	(Day)
10	4	19	. 17	4.	1.		! •		12
IJ	77	S	0	0.	9		•		2
77	21	01	0.	4	3		ъ.	•	9
12	82	ω	.5	9	Ļ		0	•	S
12	54	\sim	٦.	٦.	. 3		5		8
12	62	đ	ω.	9.	0.		9	٥	7
12	79	19	۲.	ω.	. 7	Ą	0	۰	\sim
12	00	53	0.	0.	. 2	~	Ą.	0	\sim
12	11	57	.2	4.57	.2	~	12.4		S
13	35	9	۲.	9	0.	ğ	0	٥	$_{\infty}$
13	26	∞	۰ 4	ω.	ů	~	0	•	-
13	44	00	2,	٢	ن.	-	2	0	α
1140	256.	101,	6.28	•	1.16	19.	10.9	5.9	721
14	13	2	⊣	3.21	8		11.9	•	9
14	\sim	2	۲.	9.	3		11.7	5,0	2
15	⋖	88	ထ	3.82	2,		10.3	•	\sim
15	\sim	ω	٠4	0.	۲.		-	0	2

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7-2-F2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

10 ppm Level and Sex :

Female

Animals Killed in Extremis

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		(Day)	
	CI		98%
	K	(mEq/l)	. 4 4
	Na	(mEq/l)	140.
unn the see over set two the tim ser set the CIII	Animal	Number	1105
•			•

		4					•											
C.I.	(mEq/1)	98°	96°	104.	108.	. 66	104.	106.	97.	100.	108.	101.	105.	103.	106.	104.	95°	. 66
X	(mEq/l)	.5			.7	.2	3,5	8.	ω.	9.	ε,	ω.	Т.	ە ق	ι, L	.7	M	5.3
. Na	Eq./	140.	141.	137.	149.	146.	142,	143.	145.	140,	144.	144.	136.	140。	140.	133,	M	132.
Animal	Number	1105	1112	1119 -	1120	1121	1122	1124	1127	1129	1134	1137	1139	1140	1141	1147	1150	1152
		•																

APPENDIX 7-2-F3

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm

Female

Animals Killed in Extremis

(mIU/ml)
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W : Not measured because of shortage of serum.

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CONTINUED(1)

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

100 ppm Level and Sex :

Female

Animals Killed in Extremis

	Day)	! ហ	9	S	Ч	2	2	9	~	}	~	7	· C	y c	O	>
Inorganic Phosphate	(mg/dl)			•		•	•	•	•				•	•	۰	•
Calcium	(mg/dl)	11.1	2	•	•		•	•	, m	0	6	\ \c		o o	•	•
Urea Nitrogen	(mg/dl)	26.	18.	24.	18.	13,	14.	ထ	24.	25.	18.	12.	ی ا	,	2	•
N/G			•	•	•	•		•								. 1
Albumin	(g/dl)		•	•	•	•	•	•	•	•	•		۰			, 1
Total Protein				Ψ,	w.	7.	ω.	0	ω.	_	۲.		_		9	!
Glucose	(mg/dl)	91.	77。	52,	Ο)	3	61	45.	. 97.	. 62	9	2	\sim	07	Ť	
Phospho- lipids	(mq/dl)	w	w	w	99	92	92	ω ω	40	മ		\sim	\sim		\sim	
Animal	Number 	20	20	202	27	77	77	22	22	22	22	22	23	23	24	
	Phospho- Total Lipids Glucose Protein Albumin A/G Nitrogen Calcium Phosphat	Phospho-Total Urea Inorgani lipids Glucose Protein Albumin A/G Nitrogen Calcium Phosphat (mq/dl) (mg/dl) (mg/dl) (mg/dl)	Phospho- Total Urea Inorganic nimal lipids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate umber (mq/dl) (q/dl) (g/dl) (mg/dl) (mg/dl) (mg/dl) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4	Phospho- Total Urea Inorganic nimal lipids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate umber (mq/dl) (mq/dl) (mg/dl) (mg/dl) (mg/dl) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 207 361. 77. 7.38 3.76 1.04 18. 12.9 4.9	Phospho- nimal lipids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate umber (mq/dl) (q/dl) (g/dl) (mg/dl) (mg/dl) (mg/dl) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 207 361. 77. 7.38 3.76 1.04 18. 12.9 4.9 209 288. 52. 3.85 1.73 0.82 24. 8.8	Phospho- Total Urea Inorganic Unimal libids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate Unimal libids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate (mq/dl) (mq/dl) (mq/dl) (mg/dl) (mg/dl) (mg/dl) (mg/dl) (mg/dl) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 203 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4	Phospho- Inorganic Total Urea Urea Urea Urea Inorganic Inor	Phospho- Inimal libids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate Urea Urea Urea Inorganic In	Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (mq/d1) (q/d1) (q/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 0.50 26. 11.1 4.4 207 361. 77. 7.38 3.76 1.04 18. 12.9 4.9 209 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 212 266. 13. 1.53 18. 4.3 4.9 212 266. 95. 6.89 4.17 1.53 18. 4.3 212 192. 131. 6.48 3.41 1.11 13. 9.0 4.6 218 192. 161. 5.89 3.60 1.57 14.1 9.7 3.6 221<	Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (q/d1) (q/d1) (q/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 207 361. 77. 7.38 3.76 1.04 18. 12.9 4.3 209 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 215 192. 131. 6.48 3.41 1.11 13. 9.0 4.9 218 192. 161. 5.89 3.60 1.57 14. 10.6 4.9 221 888. 45. 5.02 2.94 1.41 8. 9.7 6.3 223 440. 97. 6.83 3.78 1.24 <	Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (q/d1) (q/d1) (q/d1) (q/d1) (mq/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 203 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 215 192. 131. 6.48 3.41 1.11 13. 9.0 4.6 218 192. 161. 5.89 3.60 1.57 14. 10.6 4.9 221 888. 45. 5.02 2.94 1.41 8. 9.7 3.6 223 440. 97. 6.83 3.78 1.24 24. 10.4 4.5 225 388. 79. 1.16	Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (q/d1) (q/d1) (q/d1) (mg/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 207 361. 77. 7.38 3.76 1.04 18. 12.9 4.9 209 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 215 192. 161. 5.89 4.17 1.11 13. 9.0 4.6 221 888. 45. 5.02 2.94 1.41 8. 9.7 4.5 223 440. 5.74 3.08 1.24 24. 13.0 6.8 225 381. 99. 4.77 1.24 0.35 18. <t< td=""><td>phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/dl) (q/dl) (q/dl) (q/dl) (mq/dl) (mq/dl) (mq/dl) 202 465. 91. 6.17 2.06 0.50 26. 11.1 4.4 203 465. 91. 6.17 2.06 0.50 26. 11.1 4.4 204 465. 91. 6.17 2.06 0.50 26. 11.2 4.4 207 361. 77. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 9.0 4.6 212 192. 161. 5.89 3.41 1.11 13. 9.0 4.6 221 888. 45. 5.02 2.94 1.41 8. 9.7 3.6 225 388. 79. 5.74 3.08 1.24</td><td>phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (q/d1) (q/d1) (q/d1) (q/d1) (mq/d1) (mq/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 203 388. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 9.0 4.9 215 192. 131. 6.48 3.41 1.11 13. 9.0 4.9 218 192. 161. 5.89 3.60 1.57 14. 10.6 4.9 221 888. 45. 5.02 2.94 1.41 8. 9.7 3.6 222 348. 7.7 1.24 22. 10.4 4.5 225 318. 7.77 4.77 1.24</td><td>Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (mq/d1) (q/d1) (q/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 (0.50 26. 11.1 4.4 203 361. 77. 7.38 3.76 1.04 18. 12.9 4.9 204 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 215 192. 131. 1.53 18. 9.0 4.6 4.6 215 192. 161. 5.89 3.41 1.11 13. 9.0 4.6 4.6 221 888. 45. 5.02 2.94 1.41 8. 9.7 4.9 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4</td><td>Phospho- libids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate (mq/dl) (mq/dl) (q/dl) (g/dl) (mg/dl) (mg/dl) (mg/dl) 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 288. 52. 3.85 1.73 0.82 24. 18. 18. 10.7 192. 131. 6.48 3.41 1.11 13. 9.0 455. 6.89 4.17 1.57 14. 10.6 888. 455. 5.02 2.94 1.41 8. 9.7 440. 97. 6.83 3.78 1.24 24. 13.0 888. 4.77 1.24 24. 13.0 888. 4.77 1.24 24. 13.0 888. 4.77 1.24 0.35 18. 9.8 194. 125. 7.73 4.79 1.63 12. 12.0 208. 43. 3.76 1.92 0.64 208. 43. 2.36 0.64 21. 99. 47. 1.24 0.35 11. 14. 86. 10.0 208. 144. 5.63 2.36 0.65</td></t<>	phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/dl) (q/dl) (q/dl) (q/dl) (mq/dl) (mq/dl) (mq/dl) 202 465. 91. 6.17 2.06 0.50 26. 11.1 4.4 203 465. 91. 6.17 2.06 0.50 26. 11.1 4.4 204 465. 91. 6.17 2.06 0.50 26. 11.2 4.4 207 361. 77. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 9.0 4.6 212 192. 161. 5.89 3.41 1.11 13. 9.0 4.6 221 888. 45. 5.02 2.94 1.41 8. 9.7 3.6 225 388. 79. 5.74 3.08 1.24	phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (q/d1) (q/d1) (q/d1) (q/d1) (mq/d1) (mq/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 203 388. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 9.0 4.9 215 192. 131. 6.48 3.41 1.11 13. 9.0 4.9 218 192. 161. 5.89 3.60 1.57 14. 10.6 4.9 221 888. 45. 5.02 2.94 1.41 8. 9.7 3.6 222 348. 7.7 1.24 22. 10.4 4.5 225 318. 7.77 4.77 1.24	Phospho- Total Albumin A/G Nitrogen Calcium Phosphate umber (mq/d1) (mq/d1) (q/d1) (q/d1) (mq/d1) (mg/d1) (mg/d1) 202 465. 91. 6.17 2.06 (0.50 26. 11.1 4.4 203 361. 77. 7.38 3.76 1.04 18. 12.9 4.9 204 288. 52. 3.85 1.73 0.82 24. 8.8 4.3 212 266. 95. 6.89 4.17 1.53 18. 10.7 5.4 215 192. 131. 1.53 18. 9.0 4.6 4.6 215 192. 161. 5.89 3.41 1.11 13. 9.0 4.6 4.6 221 888. 45. 5.02 2.94 1.41 8. 9.7 4.9 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4	Phospho- libids Glucose Protein Albumin A/G Nitrogen Calcium Phosphate (mq/dl) (mq/dl) (q/dl) (g/dl) (mg/dl) (mg/dl) (mg/dl) 465. 91. 6.17 2.06 '0.50 26. 11.1 4.4 288. 52. 3.85 1.73 0.82 24. 18. 18. 10.7 192. 131. 6.48 3.41 1.11 13. 9.0 455. 6.89 4.17 1.57 14. 10.6 888. 455. 5.02 2.94 1.41 8. 9.7 440. 97. 6.83 3.78 1.24 24. 13.0 888. 4.77 1.24 24. 13.0 888. 4.77 1.24 24. 13.0 888. 4.77 1.24 0.35 18. 9.8 194. 125. 7.73 4.79 1.63 12. 12.0 208. 43. 3.76 1.92 0.64 208. 43. 2.36 0.64 21. 99. 47. 1.24 0.35 11. 14. 86. 10.0 208. 144. 5.63 2.36 0.65

CONTINUED(2)
7-2-F3
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 100 ppm

Female

Animals Killed in Extremis

	(Day)	657	999	658	617	427	728	5,60	720	718	732	575	607	665	609

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	(]														
J	(mEq/1)	103.	103.	96°	95°	93.	102	92.	106.	106.	102.	95.	101.	106.	9 0 0
X	(mEq/l)	4.1	4.5	4.6	3.6	5.3	4.2	3.1	4.1	3.2	3,7			3,3	m ش
	(mE											M	Μ		
Na	(mEq/l)	137	140;	137.	142.	136.	137.	133.	137.	141.	137.	W	W	140.	138.
Animal	Number	1202	\sim	\sim	\sim	2	\sim	\sim	\sim	\mathcal{C}_{1}	2	\sim	\sim	1235	2
	i														

W : Not measured because of shortage of serum.

APPENDIX 7-2-F4

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

	1		,												
7		(Day)	10	722	3	7	5	3	~	∞	\sim	(2	9	-
tal No.	Free Fatty Acid		1683	1132.	W	.066	784.	-		1026.	402.	~			1035.
Experimer	eride	(mg/dl)	747.	270°	W	162.	S	2	2	284.	99°	$^{\circ}$	71	S	212.
	Total Cholesterol	(mg/dl)	101.	106.	W	73。	78°	4	8	86.	Z.	99	21	~	
the many data data data data data data data dat	ALP	(mIU/ml)	304.	131.	M	88	160.	100.	70.	70.	88	275.	98°	72	346.
and ann ann ann ann ann ann ann ann ann	GTP-9	(mIU/ml)	4.99	1.87	W	0.77	9.	6.63	ω.	4	ω,	3.21	c,	9.	3.05
, man ann dan cer der cen cen can ann gan dan ce	LDH		268°	205。	M	543。	483.	2862	948.	4232.	377。	536.	731.	420°	
tions (COO CONS (SHO) time (Sho) (Sho) (Sho) (Sho) (Sho) (Sho) (Sho)	GPT	(mIU/ml)	95°	23 °		20 °	13°	38°	47 °	20°	57 °	15°	61 °	43°	359°
Cast late from them come from cost the first spin gain	GOT	(mIU/ml)	4	47.		ω	103.	426.	187,	462.	141。	105。	123。	1	530°
	Animal	Number	30	1308	30	37	31	31	31	32	32	33	33	33	1344
U															

W : Not measured because of shortage of serum.

APPENDIX 7-2-F4 CONTINUED(1)

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

₹.	 	(Day)	069	722	732	671	652	632	735	683	736	736	728	694	718
ıtal No. 82014	Inorganic Phosphate	(mg/dl)	1 .	0.9		4.	9,1	13.9	•	•	6.2	۰	•		5.9
Experimental	Calcium	(mg/dl)		11,2	W	9	•	12,5	•		•	۰	0	•	•
	Urea Nitrogen	(mg/dl)		23 °	W		9	78°	$^{\circ}$	~	~	S	S	Ŋ	. 26.
	A/G		1.15		ω.	1.13	9.	0.	. 7	. 7		9	5		1.30
	Albumin	(d/d1)		3.22	M	5	ů	3.06	۲.	0°	2,	0	2	9	
	Total Protein	って	6.22	0	W	. 7	9	5.94	æ	0.	ထ	\sim	0	و	.2
	Glucose	(mg/dl)	50	12	M	34	43	777	26	95	0	67	90	31	2
	Phospho- lipids	(mg/dl)	55	16	M	122.	δ	131.	7	9	2	3	0	ω	282.
	Animal	Number	0	30	30	1311	31	31	31	32	32	33	33	33	34

W : Not measured because of shortage of serum.

CONTIN
7-2-F4
APPENDIX

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CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Biochemical Data

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

Animal

Number

			Experimental No. 8	82014
CORP (CORP (CORP (CORP (CORP (CORP (CORP (CORP (CORP)	tens data cana basa cara casa masa masa cara chin chin chin			
Na	X	C1		
	(mEq/l)	(mEq/l)		(Day)
139	2.6			10
143		00		\sim
140		, co		3
132°	ຸທຸ	° '-1		671
134.		102.		Ω
136.		97.		3
139.		108.		3
140,		97.		ω
142.		94°		\sim
140.		103.		3
142,		103.		2
139,		, so o		9
142.		103		-

8-1-M1-1 APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

mdd 0 Level and Sex:

Male

Animals Killed on Schedule (104 Week)

Experimental No. 82014

Kidneys Liver Hoprt

	(Day)	733	3	\sim	\sim	\sim	m	3	3	\sim	ń	Ŕ	m	m	m	m	m	3	Ś	\sim	3	\mathcal{C}	S	
Kıdneys	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2.74	. 7	ထ	. 7	۳,	. 7	. 7	φ.	. 2	9	٠.		ω.	ω.	0.	0.	0.	0.	ω.	4.	6.	9	
Liver		4.	6.5	4.4	3.5	8.0	2.9	3,3	4.6	7.2	6.3	1.3	∞	5.0	5.3	3.4	3.4	4.8	3.3	6.5	3.4	4.8	6.2	
Heart		.16	.12	.15	.34	.31	.19	.10	.18	. 24	.07	00.	1.215	,25	,17	.28	.23	.12	.26	.13	.08	.19	.15	
Lung		.28	.92	.29	17	0.8	31	.31	.19	. 43	.80	.20	1.239	. 44	.27	.34	.39	.27	.21	30	16	. 26	.23	
Thyroid		.014	0.027	025	021	030	.035	.027	.018	0.029	.028	.033	026	.032	.039	131	.034	.014	0.032	.037	017	032	•	
Pituitary		017	0.18	014	210.	010	017	016	018	023	016	085	017	.023	014	.020	140	0.18	138	016	014	010	0.0186	
Brain		10	• 1 ~		•	د	•			٠.	. –		. ~	. ~			, ~,	, (2.23	
in	Body Weight	1 7	r r r -	7 C	- ц	7 C	• • •	, c	V V	የ ር	, r.	 	40	000	0 9		7. 7.		•	787	• c	. 7 t	482.3	
Animal	Number		۱ ر	7 0	∩ <	3 , ⊓	า น	ာ တ	` -	1 C	7 F	ታ ሆ	17	· 60	01-	0.5	2 6	ر بر	90	0 4 6	0 0	ט ר ס ר	32	

L : Excluded from statistical calculations because of loss of the unilateral organ

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Male

Animals Killed on Schedule (104 Week)

			Animals	Killed on	schedule (104	04 week)	Experimenta	al No. 8201	4
Animal		Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	
Number	Body Weight								d 1
1	1	1 (10	0.00	29	.24	4.3	0.	735
	79.	7.0	020.		. 6	25	5.1		\sim
	. 9/	7.	200	* * * * * * * * * * * * * * * * * * * *	. T	. 26	6.7	⊣.	\sim
	85.	٠, ١	200.	# C C C	γα		8.3	٣.	\sim
	37.	. ب	. 192	220.		4.2	7.7	0	\sim
	80.	?	. UZT	. 033	1, r	1 V	· α	6	ϵ
	54.	~	.024	.027	. 5 5	9 -	י י י	. 0	(
	86.	-	.024	.025		- 	כי		~
	38	7	.019	.026	. 32	· T •	⊃ , #'	•) (
	, V	-	.023	.026	. 29	.20	6.1	∞	Υ)
	• • • •		010	034	.37	.16	5.9	0	\sim
	ь ц с	• 1 C	710	032	47	H.	5.0	0.	\sim
	, c	• 4 C	017	034	3.	.08	6.3	0.	\sim
	• - α	•	910	025	. 23	.05	14.16	2.59	\sim
# # O [ο τ. σ. α.	700	0 0202	0.0348	1.272	1,269	2.9	.2	\sim
	• • •	. 1	0 1)		1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
M near			0.03314					2.934	
		36.	36	m	36	36		36	
S	27.412	0.0642	0.040433	0.018318	0.31076			0.1991	
•		•							1

APPENDIX 8-1-M1-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Male

Animals Killed on Schedule (104 Week)

82014

	(Day)	77 77 77 77 77 77 77 77 77 77 77 77 77
Testes]]]]	44 8 1 2 2 2 2 2 2 3 3 3 4 4 4 4 5 7 2 5 2 5 2 5 3 3 5 5 5 5 5 5 5 5 5 5 5 5
Spleen		1.007 1.529 1.1329 1.1333 1.1455 1.1452 1.1452 1.1666 1.1666 1.1666 1.1666 1.1666 1.1666
Adrenals	, ! !	L 0.0253 0.0614 0.0614 0.0497 0.0593 0.0565 0.0568 0.0584 0.0584 0.0584 0.0584 0.0584 0.0584 0.0589 0.0612 0.0599 0.0599
Animal	Number	111

L : Excluded from statistical calculations because of loss of the unilateral organ

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8-1-M1-2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	\sim	\sim	\sim	\sim	\mathcal{S}	\sim	\sim	\sim	736	n	\sim	\sim	736	736	! ! ! !	
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S		·									•						Ç
Testes		ω.		.2	9	9.	2.74	ω.	5	7.	•	5.29	. 4	.5	4.84	ων	
pleen		.05	.04	.39	.01	.04	.42	.15	.16	.39	.325	\sim	_		α	99	
Sp		 	_		8		7	-	-	Н	~	Ч	-	Т	0	H	8
		i w	æ	61	70	090	<™	061	\sim	9	.0716	057	47	63		073	8537
Adrenals		.058	.05	•			0	0		0	0	0	0	0	0	0	0

APPENDIX 8-1-M2-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex:

10 ppm Male

Animals Killed on Schedule (104 Week)

(Day)	733 733 733 733 733 734 734 734 735 735	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
Kidneys	2.87 3.34 3.34 2.74 2.74 2.85 3.35 3.35 3.35 3.35 3.35 3.35 3.35 3	
Liver	14.06 15.93 14.06 14.06 14.77 14.99 14.86 15.56 15.60 13.03 13.03 13.03	
Heart	1.059 1.158 1.158 1.158 1.259 1.125 1.125 1.262 1.302 1.079 1.088 1.088 1.088 1.088	
Lung	1.387 1.387 1.3884 1.349 1.349 1.224 1.224 1.301 1.303 1.362 1.387 1.387 1.387 1.387	
Thyroid	0.0285 0.0285 0.0298 0.0324 0.0324 0.0237 0.0237 0.0237 0.0256 0.0256 0.0256 0.0277 0.0258 0.0277 0.0258 0.0277 0.0355	1 1 1 1 1 1 1
Pituitary	0.0200 0.0173 0.0168 0.0168 0.01025 0.01025 0.01083 0.0191 0.0216 0.0176 0.0178 0.0113 0.0137 0.0137	
Brain	22.23 22.24 22.23 22.23 22.23 22.23 22.23 22.23 22.23 23.23 23.23 23.23 23.23 23.23 23.23 23.23	
Final Body Weight	424 502.7 4828.4 4882.9 4869.0 486.2 486.2 420.0 420.0 425.0	1 1 1 1 1 1 1 1 1 1
Animal Number	100 100 100 100 100 100 100 100 100 100	

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8-1-M2-1
APPENDIX

3.7

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 10 ppm Male

Animals Killed on Schedule (104 Week)

1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					Experimental	tal No. 8201	14
		Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	·
- !	√e1ght 							** *** *** *** *** *** *** *** *** ***	(Day)
	75.	.2	.018	.032	.16	.21	6.7	۲.	735
	86.	.2	.020	.032	.40	, 44	5.5	ω.	\sim
	72.	.2	.020	.034	.39	.25	5.4	9	\sim
	25.	.2	067	.039	.32	.15	4.3	. 7	3
	89.	.	.015	.034	,31	.26	4.0	۲.	\mathcal{C}
	67.	. 2	019	.031	.49	.49	6.6	6.	\sim
	51.	ς,	.046	.028	9	.47	9	3.16	$^{\circ}$
	46.	ς,	23	.043	.29	.18	7.4	9.	\sim
	425.1	۲.	.016	.032	.17	11.	0.	ω.	736
	44.	2.19	٠	0.0346	1.369		9	•	\sim
	434.9	۲.	/	.025	28	.65	14.39	2.94	
į	60.	2	.017	035	0	. 23	5.6	6.	Ć
	456.15	2.239	0.03391	0.03189	1.3099	1.1997	14.998		! ! ! !
	4	\sim				34	34	34	
	32.752	0.0803	0.047403	0.007985	0.09645	0.14134	1.1521	0.2739	
٠									

APPENDIX 8-1-M2-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 10 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	733	') (') (')	$\sigma \sigma \sigma$	$1 - \infty$	∞ ∞	$\sim \sim$	n m m	$\sim \sim$
Testes		44. 2.50 2.50 6.50	3 W C3 (80.2	2.20	0.7	H. r. r.	0.2	9 H 6
Spleen		1.379	. 38 8. 13	.54 .99	.04	.41 .67	.23	21 03	.99 .05
Adrenals		0.0531 0.0609 0.0646	060	.058 .061 .062	.053	.057 .057 .059	.064 .071	.052 .046	.079 .056
Animal	Number	102 103 104	$^{\prime}$		-	$\sim \sim$	$\alpha \alpha \alpha$	$1 \cap 1 \cap 1$	m m

	CHUNITION	
1	8-1-M0-2	1
	APPENDIX	***

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 10 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	73	3	3	735	3	\sim	\sim	\sim	\sim			3		
	<u>.</u>														
Se															76
Teste		.5	7.	4	9.	9.	9.	0.	6.	6.40	0	•	9		34 1.44
Spleen		.36	.54	.28	.27	.25	.63	.41	43	0.974	ω.	.68	02	1.2659	
Adrenals		.062	.065	.524	.050	.060	.063	.061	.063	0.0566	.05	0.0628	.053	0.07301	34 0.080072
Animal		13	4	4	Ą	4	4	4	4	148	Þ	151	S		S.D.

APPENDIX 8-1-M3-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

ા તા	7
Kidneys	22222222222222222222222222222222222222
Liver	11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Heart	1.052 1.052 1.073 1.073 1.164 1.164 1.142 1.142 1.198 1.198 1.1094
Lung	1
Thyroid	0.0296 0.0257 0.0257 0.0257 0.0319 0.0308 0.0301 0.0330 0.0330 0.0315 0.0316 0.0316 0.0316 0.0316 0.0316
Pituitary	0.0195 0.01999 0.01999 0.1236 0.0209 0.0278 0.0278 0.0278 0.02074 0.0208 0.0208 0.0208 0.0208 0.0209 0.0191 0.0191
Brain	2.22 2.23 2.23 2.23 2.23 2.23 2.23 2.25 2.25
Final Body Weight	4440.3 4490.3
Animal	201 200 200 200 200 200 200 211 211 211

CONTINUED	
8-1-M3-1	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

1	1622	4.6	15	.33	50 50 1.3	880	0.03	03	.218 0.03 42 42 .0574 0.04
\sim	.51	7.6	.17	.246	.025	.018		.2	72.5 2.2
\sim	2.92	14.79	1.065	1.241	0.0224	0.0144		2.21	.2
m	6.	4.6	.14	.18	.022	.010		۲.	91.3 2.1
\sim	6.	4.7	.31	.40	.033	.018		.5	15.4 2.2
\sim	. 7	1.7	.12	. 24	.032	.037		۲.	50.6 2.1
\sim	9	4.7	.14	.29	.023	.071		٦.	64.5 2.1
\sim	7.	4.4	11.	. 23	.026	.019		⊣.	70.5 2.1
\sim	۲.	5.1	.12	.12	.031	.017		۲.	29.6 2.1
\sim	ω.	4.5	.17	.23	.026	.016			86.3 2.2
\sim	ω.	3.8	.14	.30	.031	.014		.2	60.6 2.2
\sim	8	3.8	.09	.12	.022	.050		.23	48.4 2.23
\sim	9.	6.3	.33	. 44	.025	.158		٦.	82.2 2.1
\sim	0	4.7	.19	.37	.027	.015		.2	72.4 2.2
3	ᅼ.	4.0	.14	. 23	.034	.018		7	75.9 2.1
\sim	۲.	5.8	.02	. 29	.741	.020		٦.	94.7 2.1
സ	7	5.9	.33	.36	.033	.019		2	20.9 2.2
3	9	6.4	.19	.49	.030	.017		2	80.8 2.2
സ	0.	3.8	.12	.27	.025	.156		٦.	44.4 2.1
\sim	φ,	3,3	.08	ഥ	.021	.014		.15	37.4 2.15
735		6.1	.12	.32	. 23	.023	O	.20	84.4 2.20
ਕ ।						! ! !	! !		
	Kidneys	Liver	Heart	Lung	Thyroid	ituitary	Д	Brain P	al Brain
1 1 1 1 1 1 1 1 1						 			

APPENDIX 8-1-M3-2

4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

 	(Day)	1 () (~) (T) (r) ~	\sim) (r	\sim	\sim	\sim	(\sim	\sim	~	~	· ~	m	~	~	~	· ~	735
																•							
	! ! ! ! !																						
b*																							
Testes		٣.	Т.	4.	0.		9.	9	ω,	.2	4	9.	2	4		0.	.2	6.22	4.	2	5	5	2
Spleen	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.85	99.	.80	.97	.88	.98	.16	. 29	.07	00.	.28	.03	.99	.61	. 29	. 24	1.228	. 23	.13	.69	.30	. 03
Adrenals		0.0687	.063	.055	.062	.064	.050	.060	.050	.052	.063	.061	.063	.060	.057	.053	.045	.049	.060	.056	.065	051	.054
Animal	Number	201	0	0	0	0	0	\circ	-	-	-	М	\vdash	-	\vdash	-	_	_	\sim	\sim	\sim 1	\sim 1	\sim 1

APPENDIX 8-1-M3-2 CONTINUED

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

	!																				!	7
ď	1 00	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	α	$^{\circ}$	\sim	\sim	\sim	\sim	\sim	\sim	m	3	m	! ! ! ! !	
	! ! ! !																					
	- 100, 400 400 400 400 400 400 400 400	•																				
																					! ! ! ! !	
	.5	9	٠,	0.	ω,	0.	9.	۲.	9.	8	9	۲.	9	. 2	.5	4.	۲.	ο.	.2	9.	454	•
	63	.09	.90	. 42	.21	. 44	.01	. 29	.83	.54	.13	. 23	.01	. 29	.99	.88	.87	.12	.15	.91	.5915 42	٥ ٢ ٠
	.059	.048	.062	.051	.075	.064	.065	.055	.055	.083	.058	.052	.064	.051	.111	.072	.060	.057	.048	.070	.06054	1 0 1 1 0 .
Ε.	1 (7	7	\sim	\mathcal{C}	\sim	\sim	\sim	\mathcal{C}	\sim	\sim	\sim	\mathcal{C}	4	4	4	4	4	S	S	Ŋ	Mean N) ;
	er (Da	er 0.0596 1.633 8.51 73	or (Da (Da (Da (Da (Da (Da (Da (Da (Da (Da	(Da 0.0596 1.633 8.51 73 73 73 73 73 73 73 73 73 73 73 73 73	0.0596	0.0596	0.0596	0.0596	(Da 0.0559	0.0559	0.0596	0.0596	0.0596	0.0596	0.0596	0.0596	0.0596	0.0596 1.633 8.51 73 73 73 73 73 73 73 73 73 73 73 73 73	0.0596	0.0596 1.633 8.51 73 73 73 73 73 73 73 73 73 73 73 73 73	0.0596	Umber 228 0.0096 1.633 8.51 229 0.0481 1.090 5.66 230 0.0025 0.0032 234 0.0059 1.217 2.39 0.0059 1.217 2.39 0.0550 0.0831 2.245 0.0582 1.135 0.0582 1.135 0.0582 1.135 0.0582 1.135 0.0582 1.296 0.0517 1.206 0.0517 1.206 0.0517 1.206 0.0517 1.206 0.0517 0.0189 0

APPENDIX 8-1-M4-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

7	! ! ! ! !	(Day)	l Μ	733	m	3	3	\sim	3	3	\sim	\sim	\sim	$^{\circ}$	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	\sim	m 1	
tal No. 8201	Kidneys		ι &	2.84	9	ω.	.5	ω.	8	ω.	6.	ω,	ω.	9.	0.	6.	ω	. 7	0.	ထ	6.	φ.	9.	0.	
Experimenta	Liver		3.2	13.35	2.8	3.7	4.7	5.1	4.0	3.0	3.8	7.1	4.2	3.6	4.0	4.1	5.1	3.1	5.7	6.1	3.8	4.5	3.6	5.6	
	Heart		.13	1.107	. 25	.15	.04	.07	.24	.08	.07	.07	.16	.30	.16	. 22	.17	.10	. 23	.12	.22	.19	60.	.16	
	Lung		. 21	1.257	.30	. 25	17.	35	. 42	. 29	. 24	.36	.38	. 73	.38	.30	.36	.25	.30	. 53	. 29	. 25	.25	.37	
	Thyroid	 	.028	0.0266	.042	,024	.028	.034	.039	.030	.033	.028	.035	.027	.036	.036	.038	.029	.033	.032	.026	.027	.030	.033	
	Pituitary	! ! ! ! ! !	.022	0.0100	.026	.018	.015	.013	.022	.033	.019	.020	.013	.021	.026	.021	.022	.020	.016	.023	.016	.012	.021	.019	
1 1 1 1 1 1	Brain	1	. 2	2.22	. 2	. 2	. 2	٠.	. 2	. 2		.2	.2	. 2	.2	. 2	۳,	. 2	.2	۲.	?	۲.	H	2 1	
1 1 1			m	٠	81.	53.	92.	73.	. 69	86.	37.	41.	98.	07.	86.	68.	79.	50.	72.	61.	04.	02.	64.	43	
	Animal	Number	0	302	0	0	0	0	0	-	\vdash	\vdash	7	$\overline{}$	\vdash	2	2	7	2	\sim	3	\sim	m	m i	
	nima	ψı	0	0	0	0	0	0	0	-	\vdash	\vdash	7	$\overline{}$	\vdash	2	2	7	2	\sim	3	\sim	m	m	1 1 1 1

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8-1-M4-1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

! ! ! !	0.2685	1.3037	0.10048	0.15026		0.014521	0.0502		S.D.
	34	7	3.4	34					Z
	2,925	14.780	1,1851	1,3587	0.03345	0.02307	2.244	473.82	Mean
2 1	7	4.6	.24	.21	.030	.018	۲. ا	50.	2
\sim	٥.	6.7	.15	. 43	.026	.018	۲,	55.	4
m	9	7.5	.08	.91	.022	.087	ć.	68.	4
m (9	5.5	. 26	.31	.024	.018	?	80.	4
m	. 7	5.2	.19	.31	029	.012	2	72.	4
\sim	φ.	6.3	. 13	.37	.040	.022	. 2	83.	4
\sim	• 4	6.1	.08	. 45	.026	.019	۲.	94.	4
3	6.	6.0	.46	. 46	.030	.020	ε,	99.	4
\sim	. 2	2.8	.17	. 26	.035	13	. 2	83.	4
m (0.	4.2	. 44	.35	.034	.020	ω.	00.	4
3	φ.	. 2	1.340	1.535	0.1025	0.0214	2.27	487.7	338
735	3.48	15.83	.26	.27	.032	65	.2	77.	1 6
d 1								bouy Weight	Number
	Kidneys	Liver	Heart	Lung	Thyroid	Pituitary	Brain	Final	Animal
	 					!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
L 4	No. 820	Experimental							
		するととしていると							

APPENDIX 8-1-M4-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

	(Day)	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7
	; ; ; ; ; ;	
	1 Pr	
	1 1 1 1 1	
Testes		3.28 2.11 2.01 4.97 4.97 6.94 6.94 7.23 7.23 6.17 6.17 6.17 6.17
Spleen		1.093 1.122 1.123 1.123 1.238 1.238 1.258 1.258 1.292 1.292 1.292 1.242 1.242 1.242 1.242 1.242 1.242 1.252
Adrenals		0.0548 0.0467 0.0551 0.0551 0.0554 0.0554 0.0513 0.0536 0.0536 0.0529 0.0529 0.0529 0.0529 0.0459 0.0459
Animal	E	301 302 302 303 303 303 314 317 327 331 331 332 333 333 336

CONTINUED	
8-1-M4-2	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Male

Animals Killed on Schedule (104 Week)

ಹ	735 735 735 736 736 736 736 736 736	
Testes	3.06 5.74 2.53 2.07 7.47 6.14 6.71 3.48 4.25 3.31 5.13 6.11	4.830 34 1.9022
Spleen	1.067 1.298 1.133 0.923 1.618 1.373 1.413 1.251 4.932 2.200 1.272	W 4 0 1
Adrenals	3792777777	0.14546 34 0.510662
Animal Number	337 337 338 340 342 344 344 344 351	Mean N S.D.

APPENDIX 8-1-F1-1

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 0 ppm Female

Animals Killed on Schedule (104 Week)

Animal	in	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	
Number	Body Weight								(Day)
	1 0	10	017	032	84	.95	0.1	0	4
		•	910	031	13	.14	0.2	2	4
	0 -		, c c c	000	96	88	1.0	7.	4
			0 C 1 C C	028	63	.91	0	5	4
		•	200	023	60	.87	8.5	۲.	4
2 5	. a	•	031	033	.97	.05	2.2	4.	4
7 5		•	0.0	026	90	.85	8.2	6.	4
ן כ		•	010	021	84	.84	9	6.	4
1018	317.5	90.7	0.0174	0.0254	0.880	0.903	9.65	2.06	740
7 5	1 ' L	•		023	. 84	.87	ω.	0.	4
7 0	, ,	. <	0.04	026	88	00.	Φ.	٦.	4
700		. 0	, C	027	. 86	.89	ω.	0.	4
700	, 00 -			700	06	. 88	2	6	4
70	Би		010	028	41	. 97	۲.	6.	4
700			010	033	. 93	89	9.4	6	4
7 0	, , ,			026	96	00.	1.2	4.	4
7 0) (, C		020	9.0	88	٣.	0	4
70	• 0				, a	2 0	م ا	,	4
7.0	ζα.	?	.032	. 0 4 7		•	•	-	~
03	69.	0	.021	.040	. 94	0	, ,	•	۳ <
03	15.	9	.022	.025	.98	92	· .	ص	せょ
03	90.	9	.013	.022	. 81	8/.	Z . Z	ο.	₩,
5	, ,	_	0.0	000	0	0	ر ر	٢,	d

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8-1-F1-1	
APPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Female

Animals Killed on Schedule (104 Week)

82014	s (Day)	742 742	742	743	743	743	743	743	743		
ntal No.	Kidneys	2.27								2.161 31 0.195	
Experimental	Liver	15.54	9.	2	v.	. 4	4.	9.47	ω.	10.368 31 1.5993	
	Heart	0.936	.88	.90	.85	.89	.87	.01	90	0.9214 31 0.07369	
	Lung	1.877	.93	96.	.94	.00	.99	.02	.11	1.0091 31 0.21191	
	Thyroid	0.0254	.023	22	.025	.020	.024	0.	.024	0.02751 31 0.004870	
	Pituitary	0.0180	\vdash	.026	.016	2	.025	\sim	5	0.03923 31 0.054098	
	Brain	2.00	2.04	•		•	•		•	2.006 31 0.0389	
	Final Body Weight	280.1	36.	43.	24.	21.	56.	21.	27.	323.46 31 28.632	
		1035	1039	1040	1042	1046	1047	1048	1052	Mean N S.D.	

APPENDIX 8-1-F1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 0 ppm Female

Animals Killed on Schedule (104 Week)

82014

Experimental No.

(Day) 740 740 740 740 740 740 740 740 741 741 741 742 742 742 741 741 741 741 741 741 Ovaries 0.0728 0.0402 0.0724 0.0627 0.0554 0.0921 0.0658 0.0658 0.0963 0.0804 0.0945 0.0807 0.0874 0.0499 0.2494 0648 0.440 0.527 0.561 0.835 0.593 0.606 0.712 0.810 0.620 1.136 0.730 0.739 0.939 Spleen 0.0642 0.0653 0.0643 0.0741 0.0601 0.0268 0.0589 0.0589 0.0571 0.0607 0.0550 0.0654 Adrenals 0.0690 0.0630 0.0714 0.0489 0.0641 П Animal Number 1008 1009 1010 1013 1016 1018 1019 1020 1021 1023 1024 1025 1026 1030 1031 1032 1022 1029 1002 1003

organ the unilateral of loss oĘ because Excluded from statistical calculations ••

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CONTINUED	
8-1-F1-2	
PPENDIX	

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 0 ppm

Female

Animals Killed on Schedule (104 Week)

	(Day)	742	ゼ	4	4	4	4	4	4	4	
Ovaries		.064	.042	.069	0.0684	.116	.069	.079	.070	.044	0.07835 31 0.035649
Spleen		.84	.30	.56	0.615	.63	.84	. 74	.55	81	1.0727 31 1.25607
Adrenals		2	.053	090.	0.0690	.069	.057	.067	2	344	0.06434
Animal		1035	1038	1039	1040	1042	1046	1047	1048	0.5	Mean N S.D.

APPENDIX 8-1-F2-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 10 ppm

Female

Animals Killed on Schedule (104 Week)

!	-
(Day)	77 77 77 77 77 77 77 77 77 77 77 77 77
Kidneys	2.28 2.28 2.28 2.20 2.23 2.23 2.22 2.23 2.22 2.23
Liver	10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33 10.33
Heart	0.834 0.929 0.929 0.915 0.915 0.950 0.915 0.912 0.921 0.921
Lung	0.940 0.940 0.940 0.940 0.937 0.937 0.924 0.924 0.929 0.929
Thyroid	0.0238 0.0242 0.0204 0.0214 0.0276 0.0274 0.0239 0.0234 0.0236 0.0236 0.0236 0.0236 0.0236 0.0243
Pituitary	0.0261 0.0261 0.0238 0.0164 0.0238 0.0238 0.0133 0.0162 0.0187 0.0136 0.0142 0.0142 0.0135 0.0135 0.0135
Brain	1.099 1.099 1.099 1.099 1.093 1.099 1.099
Final Body Weight	327.8 3340.4 3340.4 3340.4 3352.8 310.5 320.8 320.8 326.6 367.2 361.7
Animal Number	1103 1103 1103 11004 11006 11108 11111 11111 11111 11128 11128 11131 1133

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8-1-F2-1	
APPENDIX	

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 10 ppm Female

Animals Killed on Schedule (104 Week)

.4	(Day)	77777777777777777777777777777777777777	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
al No. 8201	Kidneys		0.1.09
Experimental	Liver	0 0 1 5 8 2 2 3 4 4 4 6 0 8 2 1 5 6 7 6 1 5 6 7 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1 6 1	I.3628
	Heart		0.09546
	Lung		0.05739
	Thyroid	32 22 22 23 23 24 24 24 24 24 24 24 24 24 24 24 24 24	0.003034
	Pituitary	. 0177 . 0265 . 0180 . 0177 . 0542 . 0240 . 0243 . 1208 . 1168 . 0364	0.051373
	Brain		0.0406
	Final Body Weight	i i e	
	Animal	1136 1138 11138 11142 11444 11446 11446 11449 1151 Mean	S.D.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm

Female

Animals Killed on Schedule (104 Week)

! ! ! !	(Day)	1 7	rv	740	⊽ ₹	ਹਾ ਤ	ਹਾਂ ₹	∵ ~	J" ~	J <	, <i>–</i>	" ~	* ~	# ~	# ~	# -			- *			
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																				
		1 1 1 1																				
		: ! ! !					i															
Ovaries		0.	.067	\vdash	053	.057	.092	070	.063	.067	.067	.076	362	060.	056	078	075	133	068	079	058	077
Spleen		. 72	.48	0.548 0.665	.7	. 56	.44	.63	. 64	. 53	. 58	. 73	. 65	.83	. 56	65	99,	63	64	69	47	12
Adrenals		90.	90.	0.0532	90.	.065	.059	.070	.070	.06	.054	.073	.059	.070	.052	.056	061	076	056	053	057	090
Animal	Number		J	1104	70	70	70	20	Z		\Box					12	7	12	2	3	\sim	\sim

CONTINUED
8-1-F2-2
APPENDIX

10

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex: 10 ppm Female

Animals Killed on Schedule (104 Week)

1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1
Animal	Adrenals	Spleen	Ovaries	
Number			(Day)	Day)
13	990.	. 76	. 0725	i 4
13	. 491	.56	.0814	4
13	.058	. 75	.0763	' 7
14	990.	.63	.0866	4
14	.075	.64	.0581	4
マ	.060	. 54	.0751	7
14	.059	. 75	.0530	7
14	.064	.56	.0886	7
14	.086	.88	.0579	7
149	0.0740	0.838	0.0733	4
5	.066	. 58	.0654 74	4
lean	0.07683		0.14308	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
.D.	53 0.074753	33 0.41607	0.3	

APPENDIX 8-1-F3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Female

Animals Killed on Schedule (104 Week)

	<u>.</u>
(Day)	
Kidneys	22.22222222222222222222222222222222222
Liver	10.01 10.05 11.01 10.05 10.04 8.86 8.87 8.17 10.05 11.00 10.05 11.00 10.05 11.11 9.66
Heart	1.093 1.180 0.948 0.958 0.930 0.942 0.965 0.972 0.937 1.041 0.937 0.982 0.982 0.982
Lung	0.928 0.928 0.928 0.928 0.924 0.939 0.936 1.075 1.075 0.920 0.979 0.943
Tḥyroid	0.0273 0.0228 0.0228 0.0218 0.0295 0.0298 0.0277 0.0262 0.0233 0.0233 0.0233 0.0236 0.0236 0.0236
Pituitary	0.0125 0.0287 0.0287 0.0183 0.0182 0.0152 0.0182 0.0182 0.0196 0.0156 0.0156 0.0203 0.0203 0.0205 0.0167 0.0167
Brain	1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Final Body Weight	3311.3 3316.5 3316.5 3314.5 329.7 3290.3 3313.8 3320.9 3320.9 3320.9 3320.9 3320.9
	1201 1203 1203 1203 1200 1210 1211 1220 1220

				4	1	(Da	74	4 /	74	74	74	74	74	74	
				1 No. 8201	Kidneys		9.			۲.	. 2	٣.	6.	. 2	2.140 31 0.1523
	STUDY			Experimenta	Liver		1 00	7.		0.6	11.07	1.2	7	.7	10.167 31 1.6226
CONTINUED	TOXICOLOGICAL ST RATS	a (Grams)	Female	104 Week)	Heart		0.914	. 91	0.940	.97	.98	. 94	.80	00	0.9375 31 0.08707
8-1-F3-1	ATION F344	Weight Data	100 ppm	Schedule (1	Lung		1 4.0	ص	7 ~	.95	.97	. 92	.90	.92	0.9565 31 0.08713
APPENDIX	INOGENIC INHAL OF METHANOL IN	ividual Organ	and Sex :	Killed on	Thyroid		.023		.023	.023	.020	.028	.019	27	0.02580 31 0.006543
Ą	AND CARCINC OF	Indiv	Level	Animals	 Pituitary		.017	0.0235	.016	.033	.017	.019	.012	.021	0.03315 31 0.047668
	CHRONIC		٠		Brain		0.	2.03 1.96	.0	0.	0.	ο.	0.	0.	2.011 31 0.0460
	·				in.	Body Weight	31.	344.3	45.	21.	88	86.	92.	68.	331.56 31 33.923
					Animal	Number	24	1242 1245	24	24	24	25	25	25	Mean N S.D.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Female

100 ppm

Sex

and

Level

Schedule (104 Week) on Animals Killed

82014

Experimental No.

Day) 7740 7740 7740 7740 7741 7741 7741 741 741 741 741 742 742 742 Ovaries 0.0716 0.0585 0.0789 0.0661 0.0881 0.0718 0.0697 0.0730 0.0598 0.0603 0.0746 0.0596 0.0630 0.0612 0.0746 0.0593 0.657 0.565 0.565 0.686 0.624 0.541 0.561 0.454 1.174 1.174 1.066 0.468 0.526 0.438 0.612 Spleen 0.451 0.761 0.761 Adrenals 0.0666 0.06666 0.0616 0.0637 0.0693 0.0663 0.0668 0.0668 0.0668 0.0668 0.0668 0.0668 Animal Number 1214 1216 1217 1217 1222 1228 1229 1205 1206 1208 1210 1213 1220 1232 1234 1237 1238 1239 1203

CONTINUED
8-1-F3-2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 100 ppm Female

Animals Killed on Schedule (104 Week)

00499999999999999999999999999999999999	0.641 0.0757 0.764 0.0734 0.652 0.0716 0.701 0.0693 1.700 0.0633
53 99	672 U.U53 658 0.083 669 0.072
06316 31 006603	1.0081 0.07031 31 31 1.60892 0.012623

APPENDIX 8-1-F4-1

4

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex: 1000 ppm Female

Animals Killed on Schedule (104 Week)

82014

		! !																					J
	(Day)	1 4	י סי	740	4	₽,	マ	4	4	4	4	ひ	4	4	4	∀	~#	~ #	<₩	7	7#	~	~
Kidneys		! 0	0	2.15	ς.		.2	0.	ω,	9.	9.		9.	ω,	۲.	9	-	0.	2	5	6	0	0.
Liver		. 5	· ~	10.33	1.2	٦.	0.5	9.9	7.	8.1	. 2	0.	. 2	0	9.8	0.0	0.3	0	1.2	1.9	9.8	9	ω,
Heart		.84	.89	0.933	.98	00.	96.	96.	.88	.85	.82	. 76	.82	.89	.90	.95	.98	.90	.89	.01	.93	.91	.93
Lung	 	.91	.89	0.891	.97	.09	.93	.88	.32	.92	. 79	.85	.83	.06	.92	. 22	. 23	.92	.14	.99	.94	.91	90
Thyroid		.022	.030	0.0251	.025	.040	.028	.025	.028	.025	.031	.026	.023	.021	.028	.029	.027	.028	.026	.025	.025	.024	.023
Pituitary	1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to	.014	.016	0.0213	.023	.019	.025	.020	.018	.022	.011	.018	.015	.025	.011	.034	.036	.013	.013	.088	.028	.026	.029
Brain	! ! ! ! !	9	6.	2.02	0.	6.	0.	6.	0.	6.	6.	6.	6.	0.	0.	٥.	0.	0.	0.	6.	0.	0.	σ.
Final Body	Weight	29.	26.	318.8	57.	73.	54.	19.	. 69	75.	85.	10.	27.	57.	97.	25.	08.	28.	84.	63.	. 69	42.	05.
Animal	Number	1301	30	30	30	30	37	31	31	31	31	32	32	32	32	32	32	32	33	33	33	33	33

				4		(Day)	4	4	4	4	4	743	4,	4	4	4	4	743	4		
				al No. 8201	Kidneys		9.	. 2	۲.	٠.	6.	2.19	٠.	7	٦.	٣.	0.	⊢.	0	2,132	
	STUDY			Experiment	Liver	1 1		ω.	0.1		ω.	10.89		•	9	٣.	. 7	φ.	ر م	10.201	35 1.2698
CONTINUED	TOXICOLOGICAL ST RATS	ta (Grams)	Female	104 Week)	Heart		.87	.95	.86	90	.86	0.980	.86	. 19	.90	.02	.94	96.	.93	0.9249	
8-1-F4-1	10N 344	Weight Da	1000 ppm	Schedule (1	Lung		.09	.90	.88	.99	.01	0.933	.02	.07	. 92	01	.95	.02	.03	9586.0	35 0.11598
APPENDIX	OGENIC INHALAT METHANOL IN F	idual Organ	and Sex:	Killed on	Thyroid		.025	.030	.022	.027	.026	0.0244	.026	.034	.055	.025	.021	.027	.023	0.02753	35 0.006035
A	AND CARCINC OF	Indiv	Level	Animals	Pituitary		.019	.030	.018	.023	.074	0.0167	.013	.015	.023	.026	.016	.017	.014		35 0.015788
	CHRONIC				Brain		0.	6.	9.	0.	6.	1.99	0.	0	6.	6.	0.	0.	6.	1.999	35 0.0340
					in in	Ξ	11.	37.	16.	79.	19.	320.9	02.	57.	93.	.60	38.	85.	07.		35 30.735
					 Animal		33	33	34	34	34	1345	34	34	34	34	35	35	35	Mean	S.D.

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Female

шdd

1000

Sex

Level and

Animals Killed on Schedule (104 Week)

82014

Experimental No.

(Day) 740 Ovaries 0.0646 0.0776 0.0739 0.0551 0.1066 0.1070 0.0888 0.0625 0.0616 0.0409 0.0865 0.0901 0.0547 0.635 0.754 0.558 0.558 0.522 0.522 0.522 0.522 0.526 0.522 0.522 0.522 0.522 0.522 0.522 0.522 0.784 0.520 0.544 0.550 0.544 0.550 0.551 0.551 0.568 0.571 Spleen Adrenals 0.0595 0.0704 0.0700 0.0586 0.0599 0.0550 0.0592 0.0659 0.0511 0.0653 0.0546 0.0656 0.0569 0.0649 0.0683 0.0610 Number Animal 1306 1307 1313 1314 1314 1314 1320 1321 1322 1322 1323 1324 1324 304 1327 1330 1331 1332 303

CONTINUED
8-1-F4-2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 1000 ppm Fe

Female

Animals Killed on Schedule (104 Week)

APPENDIX 8-2-M1-1

CHRONIC AND CARCINGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex:

0 ppm Male

Animals Killed in Extremis

Animal Number	Final Body Weight	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	
7	43.	0.	.276	.027	.23	.19	1 6	1 6	10
	49.	4.	.022	.032	.02	94	1.2		ω
	89	4.	.018	.033	.43	.26	1.0		0
	54.		.017	.029	.32	.32	4.3		\neg
	51.	.2	.011	.016	.26	.06	7.8	4	സ
	80.	!	.094	.023	.31	.14	7.0	6	
	61.	۲.	.353	.032	.24	.05	2.0	0	יו נ
	89.	.2	.195	.030	. 23	.05	0.5	. 0	. [
27	480.6	2.12	0.0195	0.0277	1.106	1.049	10.44	2,55	673
	44.	۲.	.009	.018	.95	.90	7,5	,	ז ע
	94.		.016	.027	. 74	.16	7.5	0	∞
	35.	. 2	.013	.033	.52	45	· co	. ~	\sim
	54.	-	.070	.154	.14	11.	2.4	2.9	
	38.	. 2	.015	.029	.27	.87	7.8	4	
	65.	۲.	10	.016	.10	.04	5	, (4

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 0 ppm Male

Animals Killed in Extremis

Animal Adrenals Spleen Testes Number 7 0.0588 0.626 1.77 10 0.0766 3.096 2.57 11 0.0627 8.330 2.74 12 0.0629 1.186 3.29 24 0.0146 0.939 1.92 25 0.0493 0.660 4.53 26 0.0435 0.581 27 0.0588 1.770 1.03 28 0.0528 0.849 5.91 29 0.0491 0.500 2.81	 	1			Experimental No. 82014
0.0588	Animal	al	ple	este	!
7 0.0588 0.626 1.77 8 0.0662 3.096 2.57 9 0.0776 1.088 3.40 1 0.0694 1.795 4.17 1 0.0627 8.330 2.74 2 0.0746 0.939 1.92 4 0.1146 0.749 4.53 9 0.0435 0.660 4.53 4 0.1836 10.537 2.75 9 0.0568 1.03 9 0.0528 0.884 5.91 0 0.0491 0.500 2.81	Number	! ! ! ! ! !			·(Day)
8 0.0662 3.096 2.57 0 0.0776 1.088 3.40 3 0.0694 1.795 4.17 4 0.0627 8.330 2.74 4 0.0746 0.939 1.92 4 0.1146 0.749 4.53 5 0.0435 0.587 3.09 6 0.0568 1.770 1.03 9 0.0568 1.770 1.03 9 0.0528 0.884 5.70 0 0.0491 0.500 2.81	7	.058	.62	7.	
0 0.0776 1.088 3.40 3 0.0694 1.795 4.17 6 0.0627 8.330 2.74 1 0.0629 1.186 3.29 2 0.0746 0.939 1.92 4 0.1146 0.749 4.33 7 0.0493 0.660 4.53 9 0.0435 0.587 3.09 4 0.1836 1.070 1.03 3 0.0568 1.770 1.03 9 0.0986 0.849 5.70 0 0.0528 0.884 5.91 2 0.0491 0.500 2.81	8	990.	.09	5	177
30.06941.7954.1760.06278.3302.7410.06291.1863.2920.07460.9391.9240.11460.7494.3370.04930.6604.5390.04350.5873.0940.183610.5372.7530.05681.7701.0390.09860.8495.7000.04910.5002.81	10	.077	.08	4.	700
6 0.0627 8.330 2.74 1 0.0629 1.186 3.29 2 0.0746 0.939 1.92 4 0.1146 0.749 4.33 7 0.0493 0.660 4.53 9 0.0435 0.587 3.09 4 0.1836 10.537 2.75 9 0.0568 1.770 1.03 9 0.0986 0.849 5.70 0 0.0528 0.884 5.91	13	.069	.79	۲,	800
10.06291.1863.2920.07460.9391.9240.11460.7494.3370.04930.6604.5390.04350.5873.0940.183610.5372.7530.05681.7701.0390.09860.8495.7000.05280.8845.9120.04910.5002.81	16	.062	.33	7.	# T / V
2 0.0746 0.939 1.92 67 4 0.1146 0.749 4.33 67 7 0.0493 0.660 4.53 62 9 0.0435 0.587 3.09 35 4 0.1836 10.537 2.75 68 9 0.0568 1.770 1.03 70 0 0.0986 0.849 5.70 70 0 0.0491 0.500 2.81	21	.062	.18	.2	J C T
40.11460.7494.3370.04930.6604.5390.04350.5873.0930.04350.5873.0940.183610.5372.7550.05681.7701.0390.09860.8495.7000.05280.8845.9120.04910.5002.81	22	.074	. 93	9	077
7 0.0493 0.660 4.53 9 0.0435 0.587 3.09 3 0.0568 1.770 1.03 9 0.0986 0.849 5.91 2 0.0491 0.500 2.81	24	.114	.74	ς.	0/0
9 0.0435 0.587 3.09 35 4 0.1836 10.537 2.75 68 3 0.0568 1.770 1.03 70 9 0.0986 0.849 5.70 72 0 0.0528 0.884 5.91 70 34	27	.049	99.	ν.	6/9
4 0.1836 10.537 2.75 3 0.0568 1.770 1.03 9 0.0986 0.849 5.70 0 0.0528 0.884 5.91 2 0.0491 0.500 2.81	29	.043	.58	0	0 4 C
3 0.0568 1.770 1.03 70 9 0.0986 0.849 5.70 72 0 0.0528 0.884 5.91 70 2 0.0491 0.500 2.81	34	.183	.53	7	D W
9 0.0986 0.849 5.70 72 0 0.0528 0.884 5.91 70 2 0.0491 0.500 2.81 34	43	.056	.77	0	107
0 0.0528 0.884 5.91 70 70 70 70 2.81 34	49	.098	.84	. 7	101 001
2 0.0491 0.500 2.81 34	20	.052	.88	9.	902
	52	.049	.50	ω.	347

8-2-M2-1APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

10 ppm Level and Sex:

Male

Animals Killed in Extremis

rnytota Lung	> TOTTOTA		
			zazn filuilary
0329 1.3		.020	.15 0.020
0257 1.3		.198	.09 0.198
0.0409 1.51		0.0218	0.021
0225 1.3		.013	.22 0.013
0340 3.2		.022	.13 0.022
0158 2.1		.009	.11 0.009
0250 1.4		.019	.09 0.019
0401 1.3		.171	.24 0.171
0316 1.2		.040	.24 0.040
0306 1.4		.016	.29 0.016
0247 2.4		.014	.24 0.014
0269 1.4		.013	.19 0.013
0171 2.4		10	.25 0.010
		C C	21 0 0 5 5
0330 2.4		•	.z.

APPENDIX 8-2-M2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm

Male

Animals Killed in Extremis

	(Day)	۱ ,	1 4	721	1 (1)	-	-	σ	\ 	4	\sim	-	9	σ	١ ٥
Testes		.2	9.	3,90	ω.	ω.	ο.	4.	ω,	ω.	9.	ω.	9.	5	5
Spleen	1 1 1 1 1	. 93	.84	2.110	. 54	.38	7.69	.10	. 59	.08	.88	.35	.86	.22	.27
Adrenals		.055	.064	0.0719	.058	.067	.043	.054	.066	.103	.060	.083	.100	.070	.054
Animal	Number	0	0	110		\vdash	_	\vdash	2	2	2	\sim	\sim	\sim	2

APPENDIX 8-2-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm

Male

Animals Killed in Extremis

Animal	ר מי ה	D 7.		E :	ŀ		- 1	•	
T 201117 11117	Body	חדמדוו	Ficuicaly	rnyrora	rang	неагт	Liver	Kidneys	
Number	Weight			e*					(Day)
204	730.8	2.18	0.0156			1 161			631
,) ! !				TOT • T	CT: T7	2.03	100
573	404.3	2.21	0.0144		1.495	1.265	14.80	1.53	463
244	399,5	2.17	0.0132			ר אכ ר	10 01	י ר י ני	704
1		1	3000			T. 6.74	70.07	2.33	# \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
245	352.3	2.03	0.2094			1.163	14.80	3.40	671
247	586.5	2.15	0.0139	0.0566	1,183	1,167	13.59	2.60	540

APPENDIX 8-2-M3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Male

Animals Killed in Extremis

	(Day)		631	463	709	170	540
Testes			U	2.05	4.65	1.06	2.98
Spleen		1 100	201.0	3.853	13.055	0.807	0.948
Adrenals		0 0630		U.1294	0.0556	0.0756	0.0230
Animal	Numb	204	1 6	577	244	245	247

APPENDIX 8-2-M4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm

Male

Animals Killed in Extremis

(Day)	10	~	$^{\circ}$	Ю	$\overline{}$	-	ထ	α	$\boldsymbol{\sigma}$	$\overline{}$	LO		729
Kidneys	9	9	7	9	4.	ω,	9	4.	9	. 2	ω.	٠,	3.03
Liver		7.57	-	8.6	9	1.5	m	9.7	0	9.4	2.2	8.4	15.63
Heart	.22	0.980	.05	.18	.30	.98	.13	.95	.34	11.	. 29	.12	.20
Lung	.71	1.078	.62	. 42	.13	.18	.02	.34	.73	.93	.15	.38	.30
Thyroid	20	0.0221	35	30	31	21	23	25	32	32	4	33	7
Pituitary	.010	0.0079	.019	17	.016	.244	.016	25	.022	.021	.015	.020	0.0268
Brain	.3	2.24	۲.	. 2	Η.	0.	۲.	۲	۲.	. 2	2.	. 2	. 2
Final Body Weight	98.	370.1	02.	82.	79.	55.	08.	91.	82.	.90	06.	77.	57.
Animal Number	0	309	\vdash		\vdash	\sim	2	\sim	2	\sim	\sim	\sim	4

APPENDIX 8-2-M4-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Male

Animals Killed in Extremis

	E	
aardc	וו דפארמא	
1		(Day)
. 48	.5	10
.61	ω,	7
.69	. 7	$^{\circ}$
. 74	ω.	S
1.297	3.91	610
.89	. 7	\vdash
. 73	۲.	∞
.44		8
.35	4	9
. 75	9.	\vdash
.58	ω.	Ω
.92	4.44	\vdash
.64	4.82	\sim

APPENDIX 8-2-F1-1

£.5

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Female

Animals Killed in Extremis

	(Day)	616	δ	Н	9	S	4	4	$\boldsymbol{\infty}$	Н	9	2	0	/	$_{\infty}$	9	\sim
Kidneys		0.	2.	0	.7	•	9.	۲.	0.	۲.	ω.	9	ų	ω.		۲.	
Liver		6.	0.	0.	2	0.	4.	0.	. 7	9	۲.		ο.	٦.	8.85	9	. 7
Heart		.7	.87	.78	.80	. 74	.87	.91	.85	.97	.86	.93	.83	.72	0.914	.07	.02
Lung		.92	.01	.82	.83	.89	. 79	.26	.91	.64	.93	.67	. 46	.87	1.471	.88	. 92
Thyroid		.019	.021	.016	.017	.014	.021	.033	.023	.045	.034	.023	.024	.018	0.0168	.023	17
Pituitary		.336	.340	231	.011	.017	.143	.018	.028	.022	.022	.017	.009	.015	0.0300	.013	.020
Brain		10	0	6	6	0	9	ω,	0.	0.	0.	0.	0.	6.	1.96	0.	9.
ר וי	bouy Weight	21.	20.	34.	94.	22.	91.	04.	99.	93.	75.	70.	89.	17.	198.8	96.	8
Animal		00	00	0.0	00	01	01	02	02	03	03	03	04	04	1049	05	0.5

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 0 ppm Female

Animals Killed in Extremis

Animal	Adrenals	Spleen	Ovaries	
Number				(Da
0.4	990.	.72	.028	
05	.077	. 78	990	-1 C
90	0.0610	0.539	0.0326	100
0	.068	.48	54	- C
	.056	.48	.063	ח ע
015	.057	.40	.064	7 ~
\sim	.075	. 85	.064	* ~
2	.063	.99	.064	סיים
\sim	.055	.33	157	ז כג
\sim	.079	62	091	
\sim	.061	. 60	0.0	σ.
4	.087	48	7 2 2 2	\sim
4	060	٠ 7		\sim
4	110	, 0	900	/
٠ ٢				α
n L	700.	. 20	. 090	\sim
7.0	8/0.	. 84	.036	· ~

APPENDIX 8-2-F2-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex:

10 ppm Female

Animals Killed in Extremis

Pituitary
.228
0.3058
.022
.060
.039
.020
.019
.017
.138
.058
.011
.021
.033
.036
.013
.253
.056

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Female 10 ppm Level and Sex:

Animals Killed in Extremis

Experimental No. 82014	·	(Day)	722	0	lo i	0	∞ 1	_	\sim	ന	Ω	ω	$\overline{}$	∞	\sim	9	\sim	α	\sim 1
	Ovaries		.042	.029	.059	.027	.041	.030	.031	.073	.035	030	090.	.090	123	040	074	0.0511	.086
	Spleen		68	.81	11.	.34	.53	.49	.17	0.47	. 68		0.4	.03	7.95	9.	28.6	0.484	• 63
	Adrenals		.059	.081	.063	.067	.118	.076	.064	.079	590	0.67	084	052	074	100	780	0.0703	.075
	Animal	Number	1105	11	겁	12	12	12	12	12	5	ן ר זיר	7 (3	7	7 7	, _	7 LC	<u></u>

8-2-F3-1 APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

100 ppm Level and Sex:

Female

Animals Killed in Extremis

Animal	Final Body	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	
Number 	Weight	: : : : : : : :	1 1 1 1 1 1						(Day)
	65.	9.	.026	22	.50	.03	5.9	1	ו נכ
	92.	9	.034	020	. 74	60.		•) C
	. 99	9.	.021	022	.61	. 78	0 6	•) LC
	24.	0.	.200	023	9.5	92	, ,	4) -
\vdash	01.	9.	.380	017	. 79	. 65	4	ı LC	1 €
218	56.	0.	.044	038	96.	. 87	٠,		V C
	47.	9.	.016	018	.50	74	, ,	, α	υC
	39.	6.	.017	042	.03	.08	0.5	,	\circ
	85.	0.	.022	030	.02	. 98	7		J
	02.	9	.025	027	.97	.03	2.7		· ~
	41.	۲.	.067	031	.76	.70	6.1	, α	
	20.	6.	.010	017	. 78	51	4	7	
\sim	54.	6.	.019	015	3.4	34	. 6	•) (
36	283.0	1.88	0.0144	0.0268	0.927	0.946	6.80	2,23	727
	48.	6	.020	023	.04	70	· C		1 ~

APPENDIX 8-2-F3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 100 ppm Female

Animals Killed in Extremis

	(Day)	S	9	S	\vdash	\sim	2	9	\sim	718	\sim	7	0	9	\sim	0
	. !															
	-															
Ovaries		.033	040	.082	52	.025	.081	.168	.024	0.0358	.087	.037	M	.033	0.0532	.042
Spleen		17.	~	.54	.61	.36	.48	1.60	2.94	12.746	.53	.43	.26	.18	.26	.14
ഗ						~ 1	4	51	81	38	7.1	9	4	01	91	96
Adrenals S		.045	.058	.077	.073	.056	.071	.08	.05	0.07	1.0	0.	0	.07	.07	.07

M : Not measured because of operational mistake

APPENDIX 8-2-F4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

eys (Day)	69	72	0 732	67	65	63	73	68	73	73	72	69	71
Kidneys		.2	2,5(ω,	۲.	۲.	8.	4.	ω.	ο.	0.	9	8
Liver	۳.	8.4	15.19	7.7	ω.	ω.	5	7.	1.2	ω.	9	5	.
Heart	.89	.89	0.922	.73	.26	.75	. 25	.82	.88	.85	.81	.93	.82
Lung	.35	. 21	1.973	.87	.08	.95	.39	.20	.91	.97	. 93	.78	. 25
 Thyroid	023	026	0.0291	026	031	039	033	030	018	026	016	025	020
 Pituitary	.029	.015	0.0199	.016	.022	.021	.042	.017	.260	.018	.216	.036	.041
 Brain	10	0	2.02	6	0	0	0	9	ω.	0	6	0	
 Final Body Weight	11.	. 60	0	05.	83.	45.	56.	43.	89	83.	5	27.	· ~
 Animal Number	30	30	30	3 .	3	31	31	3,2	32	33	3 6	3 (1344

APPENDIX 8-2-F4-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight Data (Grams)

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

	(Day)	9	\sim	3	7	2	3	3	∞	\sim	\sim	7	694	\vdash
ies		86	9	373	0	26	33	2	00	8	4	7.1	84	0
Ovari		5	0	0.1	0.	.07	Н	0.	.07	0.		.02	0.04	
Spleen Ovar		.132 0.05	.207 0.0	84 0.	.593 0.0	.256 0.07	.189 0.11	.107 0.0	.764 0.07	.601 0.0	0.0 699.	.591 0.02	.500 0.04	.274 0.2
pleen		.0777 5.132 0.05	.0778 3.207 0.0	7.584 0.	.0677 0.593 0.0	.1370 5.256 0.07	.1036 1.189 0.11	.0578 0.107 0.0	.1208 2.764 0.07	.0743 0.601 0.0	.3693 0.669 0.0	.0559 0.591 0.02	.0807 0.500 0.04	8.274 0.2

APPENDIX 9-1-M1-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 0 ppm

Male

Animals Killed on Schedule (104 Week)

Animal	Final Body Weight	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	
Number	- !	; ; ; ;	: : : : : : : : : : : : : : : : : : :						(Day)
1	44.	т,	.003	£00°	. 29	. 26	¬	1 0	lm
2	417.6	0.55	0.0045	0.0065	0.461	0.269	3.97	0.65	733
æ	79.	7.	.003	.005	.27	. 24	0	Ψ.	m
4	52.	ш)	.004	.004	. 25	. 29	0.	Ψ.	· ~
2	78.	7	.003	.006	. 43	.27		Ψ.	\sim
9	53.	7.	.003	.007	. 28	. 26	ω.	Ψ.	\sim
6	30.	ഹ	.003	900.	.30	. 25	۲.	9	3
11	44.	വ	.004	.004	. 26	. 26	T.	6	3
12	75.	7.	.004	900.	.30	. 26	9	Ψ,	\sim
14	50.	7	.003	.006	. 40	. 24	9	6	3
15	31.	വ	.022	.008	.31	.26	9	7	3
17)4.	4.	.003	.005	. 24	. 24	Н.	r.	\sim
18	00.	7	.004	.006	. 28	. 25	0.	7.	~
19	50.	4	.003	.008	. 27	. 25	ω,	9	\sim
20	28	4	.004	.028	, 28	.27	ω.	9	\sim
23	. 2	2	.030	.007	30	.27	9	9	~
25	57.	4	.004	.003	. 27	. 24	-	9	\sim
26	١4.	4	027	.006	, 23	. 24	9	S	m
28	. 87	4	003	.007	.27	.23	4	9	\sim
30	12.	4	003	,003	. 26	. 24	0	5	m
31	39.	υ,	.004	.007	. 28	.27	ω,	9	\sim
32	•	4	003	007	25	. 23	.3	9	~
	! ! ! !								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

L : Excluded from statistical calculations because of loss of the unilateral organ

CONTINUED
9-1-M1-1
PPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Male

mdd 0

Level and Sex:

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							Experimental	tal No. 8201	14
Animal	Final Body Weight	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Number 		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			** ** ** ** ** ** ** ** ** ** ** ** **				(Day)
33	479.3	0.47	.004	.006	. 27	. 25	9	9.	ľM
35	76.	. 4	08	.007	.27	. 26	۲.	9.	3
36	85.	4.	9	.007	. 29	. 26	4	9	~
37	37.	1	.044	.005	.64	. 25	.2		\sim
38	80.	4	.004	.006	. 29	. 29	.2	9	(
39	54.	0.48	.005	.006	.34	.25	. 2	9	3
40	80.	٠.4	04	.005	.27	. 24	ω,	9	3
41	38.	.5	.004	.006	.30	.26	.3	9	3
42	484.3	0.45	00.		0.266	0.248	3.34	0.59	
45	94.	٠.4	03	.007	.27	. 23	.2	9	3
46	59.	٠.4	.003	.007	.32	. 24	2	9	3
47	. 2	₹.	.003	.007	.27	. 22	ω,	9	(1)
48	80	. 4	.003	.005	.26	.23	0	5	(1)
5.1	18	0.54	0.0048	.008	.30	0	Η.	0.79	736
Mean	462.88	0.484	0.00726	0.00721					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Z		36	36		36	36	36	36	
S.D.		0.0287	0.009010	0.003913	0.07455				

APPENDIX 9-1-M1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 0 ppm Male

Animals Killed on Schedule (104 Week)

82014

No.

Experimental

(Day) 734 734 734 735 735 735 Testes 1.09 1.55 0.19 0.63 1.28 0.67 1.27 0.47 0.81 0.251 0.255 0.223 0.307 0.307 0.189 0.237 0.228 0.228 0.250 0.249 0.248 0.319 Spleen 0.0102 0.0104 0.0131 0.0115 0.0120 0.0122 0.0142 0.0116 0.0136 0.0157 0.0106 Adrenals 0.0128 0.0127 0.0135 0.0139 Number Animal 4596

the unilateral organ of Excluded from statistical calculations because of loss ٠.

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CONTINUED
9-1-M1-2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 0 ppm Male

82014	; ; ; ; ; ; ;	(Day)	1 6) () () (7 () (Y) (*) () () ~	2) ~) ~	736	1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Experimental No. 82															-					
	Testes		7.	. 2	1.28	.3	9	9	9.	.5	5	9	-	Н.	4.	-		36		
	Spleen		. 22	. 21	0.287	.83	. 21	.31	. 23	. 26	. 28	. 26	31	.24	.26	. 23		36	0.35679	
1 1 1 1 1 1 1 1	Adrenals		.012	.012	0.0128	.016	.012	.014	.012	.012	.011	.014	.012	.009	.013	.015	0.01575		0.017614	
1 1 1 1 1 1 1 1 1	Animal	Number	33	35	36	37	38	39	40	41	42	45	46	47	48	51	Mean	Z	S.D.	

APPENDIX 9-1-M2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 10 ppm

Male

•	•
	51 0.0040 46 0.0047 48 0.0045 40 0.0037 52 0.0039 49 0.0039 54 0.0033 54 0.0652 50 0.0036

APPENDIX 9-1-M2-1 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 10

10 ppm Male

							Experimental	tal No. 8201	. 4
Animal	Final Body Weight	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	(Бау)
1 0	75.	1 4	.003	900.		. 25	.5	9.	1 0
140	486.5	0.46	0.0043	•	0.289	0.297	3.19	0.58	735
4	72.	. 4	.004	07	. 29	9	3.26	9.	\sim
4	25.	5	.015	.009	.31	.27	ς.		3
4	89.	4.	.003	.007	. 26	. 25	ω.	9.	\mathcal{C}
4	67.	4.	.004	.006	.32	.32	5	9.	\sim
4	51.	5	.010	.006	.30	.32	9.	۲.	\sim
4	46.	5	.005	.009	.29	. 26	9.	φ.	\sim
4	2	5	.003	.007	.27	.26	ω.	9.	\mathcal{C}
Ą	44.	4.	.003	.007	.30	.26	9.	9.	\sim
S	34.	.5	.004	.005	. 29	, 38	.	9.	\sim
5	.09	0.50	03	7	. 28	9	. 4		\sim
Mean		0.492	0.00761	0.00704	0.2879	0.2635	3.296	0.659	
S.D.	34 32.752		34 0.011353	34 0.001942		34 0.03098			
1 1 1 1 1 1 1 1 1									

APPENDIX 9-1-M2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm

Male

Animals Killed on Schedule (104 Week)

82014

Experimental No.

(Day) Testes 0.99 1.055 1.052 1.01 0.50 1.26 0.95 0.95 1.19 1.51 1.50 1.17 0.94 1.23 0.86 1.26 1.43 0.325 0.246 0.246 0.193 0.239 0.332 0.265 0.212 0.212 0.258 0.258 0.258 0.258 Spleen Adrenals 0.0142 0.0129 0.0126 0.0126 0.0126 0.0142 0.0111 0.0111 0.0193 0.0127 0.0124 0.0121 0.0102 0.0144 0.0146 0.0111 0.0120 Animal Number 104 1004 1007 1008 1008 1111 1114 1120 1122 1128 1129 1130 1131

CONTINUED
9-1-M2-2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 10 ppm Male

Animals Killed on Schedule (104 Week)

1 1 1 1 1 1		735	ی د) (C)	· ~	(· (C)	3	~	3	3	33		
! ! ! ! ! !		† 1 1 1 1 1											1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
 		\ { { { { { { { { { { { { { { { { { { {												
	æ	 												
1 1 1 1 1 1 1		 											 	
		! ! ! !												
Testes		0.95	. 0.	9.	. 2	7.	۲.	۲.	5	ς.	1.31	0.	1.053	34 0.3062
Spleen		0.287	. 27	. 29	. 25	.35	.31	. 32	. 22	. 42	.38	. 22		34 0.05275
Adrenals		0.0131	1111	.011	.012	.013	.013	.014	.013	.012	.014	.011	0.01595	34 0.016891
Animal	Number	13	4	4	4	4	マ	4	4	Ą	5	Ω	Mean	S.D.

APPENDIX 9-1-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Male

ary Thyroid Lung	
	ituitary
* T	!!
0.0080 0.	53
0.0055 0.	m
0.0065 0.	
0.0056 0	_
0.0069 0.	
0.0068 0.	
.0067 0.	
0.0072 0.	
.0066 0.	
.0069 0.	
.0048 0.	
.0072 0.	
.0070 0.	
.0069 0.	
.0073 0.	
.0076 0.	
.0061 0.	
.0055 0.	
.0082 0.	
0.0086 0.	
0.0077 0.	
0.0070 0.	

APPENDIX 9-1-M3-1

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CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Male

	!		ı																				ı		K	9
14	 	מ	1 ~	\sim) (C) (*) (γ c	$^{\circ}$	$^{\circ}$	7 (7 ($^{\circ}$	2	7 (2	2	2	2	2 0) (736	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
tal No. 820	Kidneys		и)	9	9	. 6	•	•	•	·		· a	o u	Эп				•			, (0.74		• • •	0.0868	
Experiment	Liver	: : : : : :	٣.	0.	┌.	4	· C		• 0	. –	•	•	•	. 0	• . r		•	•	L	0	. ~	3.73			0.3890	
	Heart	1	. 23	. 24	.25	. 24	. 25	. 25	24	ا			. 2	77	, c	, ,		2 4	, 2,	23.	23	0.248	0.2575	42	0.01994	
	Lung		.27	. 28	. 28	.31	. 26	.32	2.5	200	6	0	200	25.5	26	26.	27	27	33	24	27	0.264	0.3077	42	0.10597	
	Thyroid		.04	.005	.005	900.	.006	.187	.007	.005	.005	900	006	.005	.007	.005	.005	.007	.007	.004	.005	.005	0.01179	\sim	0.028585	
	Pituitary	1	0.0047	.003	.035	.003	.003	.005	.004	.003	.032	.014	.003	.003	.004	.004	.015	.008	.004	.002	.003	.003	0.00884	42		
1 1 1 1 1 1	Brain	!	0.45	•	4	7.	4	.2	4.	4	4.	9	. 4	4	.5	7.	4	4	5.	4.	5	4.	0.497	42	0.0402	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Final Body Weight	, I	484.4	٠ ر	44.	80	20.	94.	75.	72.	82.	48.	60.	86.	29.	70.	64.	50.	72	91.	45.	72.	449.51	42		
: 1 1 1 1	Animal Numbor	D 1	228	V (m (T) (י רד	\sim	m	ന	\sim	\sim	\sim	\sim	⇁	<₹	<+	≺⁺	~	. 0			Mean	Z	S.D.	
i		i																							i	!

APPENDIX 9-1-M3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Male

No. 82014		(Day)	1 4	J (7.33	\sim	3	m	7) (7) (7 (ο ο	7 ~	٦ (۲) (1)	(1)	(1)	, (*)	· (~	~	, ~	٦ ٨	n m
Experimental																							
; ; ; ; ;	Testes			ω.	0.83	o.		, 0			6	5	9.	0	0.	۲.	9.	.2	Τ.	9	9.	.2	. 3
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	Adrenals	; ; ; ; ; ;	.018	.013	0.0132	010	.014	.013	.012	012	.014	.012	.014	.013	.013	.012	.010	.009	.012	.013	.018	.011	.012
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APPENDIX 9-1-M3-2

CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Male

Animals Killed on Schedule (104 Week)

82014

Experimental No.

APPENDIX 9-1-M4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Male

14		(Day)	ו אין	733	י) (ד	\sim	ന	\sim (\sim	\sim	\sim	\sim	\sim) ~) ~	` ~	7 ~	~ ~	٠ ٨	2 0	\sim	\sim	\sim	\sim	\sim
al No. 820	Kidneys		1 .	0.64	•	. i	Ω,		. פ	٠ ر	9	۲.	5	5	9	y C		9 6	٠	. ע) L	ر د	5	5	9
Experiment	Liver		10	2.99	•	•	٠ د	٠,٠	. v	۰,	٦.	ω.	ω,	9	ω	0	_	9	~	י וכ) [- (، رد	עכ	2
	Heart		. 26	0.248	• 1 C	• 0 1 1	. 6	• • •	•	77.	7.	. 24	.23	.25	.24	.26	. 24	. 24	.26	2.4	, כ י	7 (7 7	43	26
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	Thyroid]]]] 1	0.0066	900.	.005	00.	00.	008	000		\ \ \ \ \ \	900	.007	002	.007	.007	.007	.006	.007	007	005	7 C C		100	/00
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9-1-M4-1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 1000 ppm Male

rain Pituitary Thyroid
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74 0.0
0202 0.003

9 - 1 - M4 - 2APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Male 1000 ppm Level and Sex :

Animals Killed on Schedule (104 Week)

Testes	
Spleen	
Adrenals	
Animal	

Number 100 0.0126 0.223 0.75 301 0.01026 0.244 1.05 302 0.0115 0.244 1.05 304 0.0105 0.229 2.19 306 0.0101 0.229 2.19 308 0.0109 0.270 0.90 310 0.0110 0.260 0.92 311 0.0224 0.29 733 312 0.0109 0.274 0.79 314 0.0224 1.59 315 0.0013 0.266 0.97 316 0.0110 0.266 0.97 317 0.0110 0.240 0.89 327 0.0104 0.276 1.33 320 0.0104 0.276 1.33 320 0.0104 0.276 1.33 320 0.0104 0.276 1.53 331 0.0129 0.296 0.55 333 0.0104 0.296 0.55 333 0.0104 0.296 0.55 333 0.0104 0.296 0.55 333 0.0104 0.296 0.55 333 0.0104 0.296	Animal	Adrenals	Spleen	Testes	
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0.2 0.0105 0.245 0.47 7,3 0.00115 0.244 1.05 0.244 1.05 0.23 0.0115 0.244 1.05 0.244 0.58 0.0105 0.229 2.19 0.200 0.229 0.200 0.229 0.200 0.224 0.256 0.010 0.224 1.05 0.256 0.256 0.256 0.256 0.257 0.013 0.024 0.255 0.256 0.257 0.010 0.256 0.257 0.010 0.256 0.257 0.010 0.255 0.256 0.257 0.010 0.255 0.256 0.257 0.010 0.255 0.256 0.257 0.0104 0.215 0.255 0.0104 0.319 0.255 0.0104 0.319 0.255 0.0104 0.319 0.256 0.2	\circ	.012	. 22		(
0.3 0.0115 0.244 1.05 73 0.58 73 73 0.0124 0.273 0.58 73 73 0.58 0.0105 0.229 2.19 73 0.58 0.0141 0.229 2.19 73 0.58 0.0141 0.229 2.19 0.274 0.274 0.274 0.276 0.90 0.274 0.274 0.254 1.59 0.254 0.274 0.274 0.254 1.59 0.55 0.010 0.293 1.23 0.013 0.240 0.89 0.240 0.89 0.276 1.33 0.0104 0.215 1.23 0.0104 0.215 1.23 0.0104 0.215 1.23 0.0104 0.215 1.23 0.0104 0.215 1.23 0.0104 0.215 1.23 0.0104 0.216 1.33 0.0129 0.296 0.255 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.241 1.33 0.0091 0.244 1.43 7.33	\circ	.010	. 24	7.	γ \sim
04 0.0124 0.273 0.58 73 73 0.658 0.0105 0.229 2.19 73 73 0.0105 0.224 1.05 0.0105 0.224 1.05 0.0101 0.224 1.05 0.0109 0.224 1.05 0.010 0.224 0.254 1.59 0.0224 0.274 0.79 0.55 0.0104 0.293 1.23 0.010 0.266 0.97 0.240 0.97 0.266 0.97 0.240 0.289 0.255 1.16 0.0104 0.275 1.33 0.010 0.225 1.16 0.296 0.055 0.010 0.225 1.16 0.296 0.055 0.0104 0.296 0.55 0.296 0.055 0.296	\circ	.011	. 24	0	$^{\circ}$
05 0.0105 0.229 2.19 06 0.0141 0.224 1.05 08 0.0109 0.224 1.05 0.010 0.256 0.90 0.010 0.256 0.92 1.3 0.024 0.79 0.010 0.256 0.97 1.2 0.0104 0.293 1.23 0.010 0.266 0.97 0.011 0.225 1.16 0.0104 0.225 1.16 0.0104 0.225 1.16 0.0104 0.225 1.16 0.0104 0.225 1.16 0.0104 0.225 1.16 0.0104 0.276 1.33 0.0129 0.26 0.55 0.0134 0.387 0.62 0.014 0.284 1.33 0.0091 0.261 1.33	\circ	.012	. 27	ິນ	$^{\circ}$
06 0.0141 0.224 1.05 08 0.0109 0.270 0.90 13 0.0136 0.254 1.59 14 0.0234 0.79 15 0.0104 0.293 1.23 16 0.0104 0.295 1.16 17 0.0104 0.255 1.16 18 0.0134 0.296 0.55 19 0.0129 0.296 0.55 10 0.0129 0.296 0.55 11 0.0129 0.296 0.55 11 0.0129 0.296 0.55 11 0.0129 0.296 0.55 11 0.0129 0.296 0.55 11 0.0129 0.296 0.55	\circ	.010	. 22		\sim $^{\circ}$
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10 0.0110 0.260 0.95 13 0.0136 0.254 1.59 14 0.0224 0.77 15 0.0083 0.179 0.55 16 0.0104 0.293 1.23 17 0.0110 0.225 1.16 20 0.0110 0.225 1.16 21 0.0129 0.296 0.55 22 0.0114 0.296 0.55 23 0.0014 0.296 0.55 24 0.015 25 0.015 26 0.017 27 0.017 28 0.017 29 0.296 0.55 29 0.0184 0.296 0.55 29 0.0194 0.291 1.33 20 0.0194 0.291 1.33 20 0.0194 0.291 1.33	\circ	.010	27	. 0	\sim
130.01360.2541.5973140.02240.2740.7973150.00830.1790.5573160.01040.2660.9773200.01100.2251.1673240.01100.2251.1673250.01040.2761.3373280.01040.3191.5373300.01340.620.55310.02960.2611.09320.01140.2411.33360.01300.2841.43	$\overline{}$.011	. 26	. 6	\sim c
140.02240.2740.79150.00830.1790.55160.01040.2931.23170.01100.2660.97200.01130.2400.89260.01100.2251.16270.01040.2761.33280.01040.3191.53300.01340.62310.02960.55330.00910.2611.09350.01140.2411.33360.01300.2841.43		.013	. 25	, LO	\sim c
15 0.0083 0.179 0.55 16 0.0104 0.293 1.23 17 0.0110 0.266 0.97 20 0.0113 0.240 0.89 26 0.0110 0.225 1.16 27 0.0104 0.276 1.33 28 0.0104 0.319 1.53 30 0.0134 0.387 0.62 31 0.0129 0.296 0.55 33 0.0091 0.261 1.09 35 0.0114 0.241 1.33	~	.022	.27		7 (
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26 0.0110 0.225 1.16 73 27 0.0104 0.276 1.33 73 28 0.0104 0.319 1.53 73 30 0.0134 0.387 0.62 73 31 0.0129 0.296 0.55 73 33 0.0091 0.261 1.09 73 35 0.0114 0.241 1.33 73	\sim	.011	. 24	ω.	\sim c
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36 0.0130 0.284 1.43 73	\sim	011	, 24	L.	2
	~	.013	. 28	4	\sim

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9-1-M4-2
APPENDIX

20-5

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Male

Experimental No. 82014		(Dav)		\sim	\sim	∾ .	\sim	\sim	\sim	\sim	\sim	\sim	\sim	736	\sim			
	Testes		0.64		0.51	4	4		. ~		- α	· [C		1.020	34	0.3953
1	Spleen		0.223	·	0.226	.19	.32	.27	. 29	. 26	.27	.05	\sim	. 28		0.2919	34	0.14498
	Adrenals		0.0234	15	0.0118	.010	.011	.010	.012	.011	.010	.013	11	.674	1 1 1 1		34	0.113581
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Animal	Number	\sim	\sim	340	4	4	4	4	4	4	₹	ZT'	10		Mean	z (s.D.

APPENDIX 9-1-F1-1

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 0 ppm Female

! ! !			 																					!
14		๙	740	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	Ą	4
ntal No. 820	Kidneys			. 7	0.67	. 7	. 7	9.	٠.	9.	9.	. 7	5	9.	9.	9.	9.	٠,	5	9.	5	9.	9.	9.
Experimenta	Liver		3.33	ω.		9.	0.	. 2	∞	9.	0.	. 2	9.	9.	9.	. 5	. 2	. 4	6.	ω.	9.	۲.	ω.	. 4
	Heart		3	.37	0.260	.27	.31	.27	.30	.27	. 28	.31	.27	.26	. 27	.30	30	30	. 25	. 25	. 23	. 29	.27	. 25
	Lung			.37	0.282	. 28	.39	. 25	.31	.27	.27	.30	. 24	. 25	. 28	. 45	.31	. 29	.27	. 25	. 25	.31	. 28	. 29
	Thyroid		.010	.010	0.0085	.008	.008	.008	.009	.007	.008	.008	.007	.008	.008	.009	.011	.008	.011	.008	.011	.008	.007	.007
	Pituitary		0.0056	.006	007	.016	.102	.008	900.	.004	.005	.004	900.	.004	.005	900.	900.	.042	.004	.009	.005	.007	.004	.009
	Brain			9.	09.0	9.	7.	5	7.	9.	9.	. 7	5	5	9.	9.	9.	9.	5	5	5	9.	9	.5
	Final Body Weight	(g)	90	03.	41.	33.	77.	81.	84.	10.	17.	75.	67.	33.	18.	15.	94.	30.	48.	38.	69.	15.	90.	71.
	Animal	um	1001	00	00	00	00	01	01	01	01	01	02	02	02	02	02	02	02	02	03	03	03	03

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9-1-F1-1
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 0 ppm Female

							Experimental	tal No. 8201	١4
E	Final Body Weight (g)	Brain		Thyroid	Lung	Heart	Liver	Kidneys	(Day)
1035	280.1	0.71	0.0064		1 1	.33	5		742
1038	92.	9.	.010	0.0111	0.470	0.357	3.37	0.76	742
\sim		0.61	900.	900.	.27	.26	ထ		742
4	43.	.5	0.0076	.006	. 28	.26	9		743
1042	2	9.	.005	.007	. 28	.26	.2		743
4	21.	09.0	0.0234	.006	.31	.27	9		743
1047	356.7	0.56	0.0072	.007	.27	. 24	.2		743
4	2	9.	.004	.007	.31	.31	9		743
2	27.	0.62	35	.007	.34	. 27		0.73	743
	ω-	0.625	0.01248	0.00853	0.3159	0.2867	3.220	0.671	1 1 1 1 1
S.D.		0.0558	0.018904	0.001427		0.03225		0.0616	
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		11 11 11 11 11 11 11 11 11 11 11 11 11	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 1 1 1 1 1 1 1

APPENDIX 9-1-F1-2

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 0 ppm Female

Animals Killed on Schedule (104 Week)

	(Day)	7 40	7 40	740	7 40	7 40	7 40	7 40	740	7 40	741	741	741	741	741	741	741	741	741	742	742	7 4 2	742	
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aries		.024	02	02	02	01	01	02	01	02	2	01	02	2	02	02	Н	07	02	02	\mathcal{C}	02	02	
Ovar			0	0	0		0	0																
Spleen		.16	.56	.33	0.219	.26	.24	.15	.17	.17	.30	.16	16	.19	.19	.24	.16	. 23	.16	16	.20	.18	.34	
Adrenals		.021	.021	.018	01	.023	.019	.017	.019	.008	.026	.016	.019	.017	.022	.023	.021	.018	.017	.014	.020	.016	.019	
Animal	mn	10	00	00	0	00	01	01	01	01	01	02	02	02	02	02	02	02	02	03	03	03	03	

L : Excluded from statistical calculations because of loss of the unilateral organ

APPENDIX 9-1-F1-2 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 0 ppm Female

No. 82014		(Day)	742	7.42	742	743	743	743	7.43	743	743	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	
Experimental N													
	g) S		13	7.		0;	9.	2	.2	1.2	.4	:42	.021
!	Ovari	1		•		•	•	•	0.02	•	•	0.02	0.0
	Spleen		. 44	. 78	.16	.17	.19	.26	0.209	.17	. 25	0.3445	0.44431
	Adrenals		2	.018	.017	.020	.021	.018	0.0188	.022	.025	.01	0.002656
	Animal	Number	03	03	03	04	04	04	4	04	0.5		S.D.

APPENDIX 9-1-F2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex :

10 ppm Female

(Day)	740	7	- 7	~ ~	. ~	~~	v	v	~	v	. 5	~	* €	, <	• •		•	* ~	• •	4 4	* •	H -1
Kidneys	1.00		0.55	ц) •	Ψ.	9.	9	7	9	Ω.	9.	Ω.	N	9	· [-	9	ω.		٧	9 6	, r	N
Liver	-		9		9	۲.	φ.	r.	0.		0.	0	ω.	0	0	9	5	~	9	9	~	2.84
Heart	.36	. 28	0.250	. 25	.27	. 25	.27	.17	. 28	.27	. 29	. 26	. 23	. 25	.30	.27	.30	. 29	. 26	. 25	. 22	.26
Lung	.41	. 29	0.240	. 28	. 28	. 26	. 23	.17	.27	.27	. 29	. 26	. 23	. 26	.31	. 28	.34	. 28	. 26	, 23	. 28	.26
Thyroid	' -	.007	.005	.006	.008	.007	.007	.004	.008	.008	.007	.007	.007	.007	.008	.007	.006	.008	.006	900.	.006	900'
Pituitary	0.0899	.008	.008	.004	.007	.021	. 006	.002	.012	.005	.008	.004	.009	.003	.063	004	.060	.006	004	.006	004	002
Brain	0.87	•	י נים	9,	٠.		U .	7' (٠.	۰ ،	O	٠ ر	ויי	υ.	٠, ١	۱ و	` .	υ,	9	υ.	5	υ
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9-1-F2-1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 10 ppm Female

Animals Killed on Schedule (104 Week)

1 1 1 1 1 1 1 1 1						11 11 11 11 11 11 11 11 11 11 11 11 11			1 1 1
	Final Body Weight (g)	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	(Day)
		0.55	0.0049	.007	1 1	.24	1 6	9.	1 4
13	•	9.	.008	08	0.307	0.300	3.56	0.77	742
13	36.	9.	.005	.006	.25	. 23	۲.	5	4
14	35.	9.	.005	.008	.27	. 28	6.	9.	4
14	41.	5	.015	900.	. 28	.30	۲.	9.	4
14	24.	9	.007	.008	. 29	.26	~	9.	4
14	39.		.007	.008	. 26	. 25	0.	9.	Ą
14	59.	.5	.006	.007	.27	.27	6.	9.	4
14	40.	9.	35	.008	.32	.37	7.	7.	4
		0.73	0.0424	.009	\sim	.32	7.	7.	4
15	40.	. 5	10	•	.27	. 29	. 2	9.	4
Mean	340.81	0.602	0.01512	0.00755	0.2789	0.2757	3,095 33	0.644	
S.D.			0.020415	0.001175				0.0982	

APPENDIX 9-1-F2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm Female

Animals Killed on Schedule (104 Week)

2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	spleen	Ovaries	
			Q)
.028	.32	٠ .	
.018	.15	.02	
017	.14	.01	
0.0156	0.195	0.036	
.018	. 21	.01	
.018	.16	.01	
.015	.11	.02	
.014	.13	.01	-
.020	.19	.01	
.018	.16	.02	
.017	.18	.02	
.018	.69	.02	
.015	.17	.62	
.019	. 23	.02	
.018	.20	.02	
.017	. 20	.02	
.022	. 24	.02	
.020	. 44	.03	
.017	.20	.02	
.014	.18	.02	
.015	.13	0.1	
.016	31	.02	

CONTINUED
9-1-F2-2
APPENDIX

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CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 10 ppm Female

Animals Killed on Schedule (104 Week)

	(Day)	42						7 43				743		
								-						
Ovaries		0.020	.02	.02	.02	.01	.02	0.016	.02	.01	.02	0	0.0402	0.10475
Spleen		0.209	.17	. 22	.18	.18	.16	0.221	.15	.26	.30	17	0.2204	0.10780
Adrenals		0.0182	.153	.017	.020	.022	.018	0.0176	.017	.025	.026	010	0.02307	0.023685
Animal	qu	1135	13	13	14	14	4	1145	14	14	14	15	Mean M	S.D.

APPENDIX 9-1-F3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 100 ppm

Female

ı	† † †	Ì		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			Experimenta	ntal No. 8201	14
Body Brain Pituita Weight	ain Pituit	ituit	ΓY	Thyroid	Lung	Heart	Liver	Kidneys	
g)	,	,	į] 					(Day)
	0 0.003	.003		0.0082		0.330		9	740
16.5 0.62 0.09	2 0.009	.009		.007	.34	.37	ε,	9	7
79.4 0.54 0.008	4 0.008	.008		900.	0.245	. 25	2.90	0.61	4
$61.1 \qquad 0.55 \qquad 0.005$	5 0.005	.005		900.	.24	. 26	.5	5	- V
14.5 0.64 0.004	4 0.004	.004		.009	. 28	. 29	7.	9	4
38.9 0.56 0.006	900.0	900.		.008	.27	.27	9	9	4
50.3 0.59 0.05	9 0.005	.005		.008	.26	.27	6.	9	4
29.7 0.62 0.004	2 0.004	.004		.016	. 28	.24	0.	9	4
1.5 0.64 0.004	4 0.004	.004		.009	.31	.29	7.	9.	マ
90.5 0.71 0.006	0.006	900.		.009	.32	.31	6.	9.	V
L3.8 0.63 0.010	3 0.010	.010		.009	. 29	.31	6.	9.	マ
20.9 0.64 0.003	4 0.003	.003		.008	.27	.26		9	4
96.3 0.69 0.005	69 0.005	.005		900.	.27	.26	7	9.	ಶ
19.4 0.63 0.007	63 0.007	.007		.007	.33	.28	5.	9.	4
33.3 0.62 0.005	62 0.005	.005		.010	.38	. 28	0.	9	A
44.3 0.58 0.076	58 0.076	9/0.		.005	30	.30	۲.	. 7	マ
39.8 0.62 0.010	62 0.010	.010		.007	.31	.26	0.	9.	◡
22.6 0.61 0.039	6T 0.039	.039		.005	. 28	.31	٣.	9	V
32.5 0.53 0.05	53 0.005	.005		.006	.25	.25	9.	5.	4
15.2 0.63 0.005	63 0.005	.005		.007	. 28	30	0	7	4
25.3 0.91 0.008	91 0.008	.008		.009	41	.39	6	0	' 🕶
54.9 0.52 0.019	52 0.019	.019		900.	. 26	. 26	5	9	₹"
			1						

APPENDIX 9-1-F3-1 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Female

-i E	Final Body Weight (g)	Brain		Thyroid	Lung	Heart	Liver	Kidneys	(Day)
1240	331.0	0.61	0.0051	0.0070	1 5	.27	1 8	1 9	742
24	44.	.5	.006	.007	. 27	. 26	6	9	742
24	91.	9.	.007	.007	30	. 25	4	7	742
24	45.	.5	.004	.006	. 29	. 27	ω.	9	743
24	21.		0.0104	.007	. 29	30	ς,	9	743
24	88.	5.	.004	.005	.25	.25	ω.	S	743
1250	386.8	0.51	•	0.0073	0.240	4	9	9	743
25	92.	9	.004	.006	.31	.27	9	9	743
25	68.		05	.007	. 25	0.272	2.65	0.62	743
Mean		0.614	0.00994	0.00785	0.2914	0.2849	3.070	0.652	
z	31	31	31	31	31	31	31	31	
S.D.	33.923	0.0755	0.013927	0.002078	0.03997		0.4173		

APPENDIX 9-1-F3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Female

4	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Day)	7.40	0 7 7	7.40	7 70	7.40	7.40	7.40	7.40	740	7.40	747	7 4 T	7 4 T	7 4 T	747	747	7 4 1	7 4 T	7 4 7	747	747	742
No. 820			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																					
Experimental			1																					
Expe								•																
			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																					
	1 1 1 1 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1					4																
	! ! ! ! !		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																					
	ហ		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1																					
1 1 1 1 1	Ovarie		.02	.01	0	.01	.03	0.5	.01	.01	.02	.02	.02	0.2	.02	.03	.02	.01	0.2	02	02	0.2	01	01
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spleen			.14	0.201	.18	18	.14	.19	.18	.17	.22	.34	.17	.15	.99	.35	.30	.31	. 23	.12	16	.19	16
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Adrenals		0	.020	.017	.014	.019	.018	.019	.014	.020	.020	.021	.017	.016	.019	.020	.021	.019	020	.016	.022	.026	.017
	Animal	Number	_	20	20	20	20	2]	21	21	2]	27	21	21	22	22	22	22	23	23	3	23	23	13
1		İ																						i

CONTINUED
9-1-F3-2
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Female

	1 1 1 1 1 1 1 1 1 1 1 1			Experimental No. 82014
Animal	Adrenals	Spleen	Ovaries	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
qwn				
1240	0.0181	7610	10	/ Yay /
\sim	.018		0.023	742
\sim	.020	. 22	0.025	742
\sim	.015	. 20	.02	742
\sim	.021	.52	0.0	7 43
\sim	.017	16	.02	7 43
\sim	.016	17		7 4 3
1251	0.0219	0.225	.02	7 43
\sim	.019	,18	0.020	7.43
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	1 1	7 43
Mean	0.01921	9808.0	0.0213	
S.D.	0.002591	31 0.50483	31 0.00382	

APPENDIX 9-1-F4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Female

		a	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4 1
ָרָ מ ניי	ranez		9.	9.	9.	9.	φ	9.	9.	φ.	9.	9.	5	9.	9.	. 7	9.	9.	9.	5	9.	.5	9.	9.
; -	1) >		6	ω.	. 2	۲.	7.	9.	۲.	٠.	6.	8.	.5	ω.	0.	. 3	۲.	٠,	0.	9.	. 2	9.	ω.	0.1
((ear		. 25	. 27	. 29	.27	.36	.27	.30	.32	.31	. 28	.24	. 25	. 25	.30	. 29	.32	.27	. 23	. 28	. 25	. 26	.30
; ;	ë nud		.27	.27	.27	.27	.40	. 26	.27	.49	.33	.27	.27	. 25	. 29	.31	.37	.39	. 28	. 29	. 27	. 25	. 26	. 29
) ((((nyror		900.	.009	.007	.007	.014	.007	.007	.010	.009	.010	.008	.007	900.	.009	.009	.008	.008	.006	.007	900.	.007	.007
	ıtuıtar		.004	.004	900.	.006	.007	.007	.006	.006	.008	.004	.005	.004	.007	.003	.010	.012	.004	.003	.024	.007	.007	.009
	raı		9.	9	9.	.5	7.	5	9.	. 7	۲.	9.	9.	9.	.5	9.	9.	9.	9.	.5	.5	.5	5.	9.
in	ei.	g	29.	26.	18.	57.	73.	54.	19.	69	75.	85.	10.	27.	57.	97.	25.	08	28.	84.	63.	69.	42.	05.
	Anımaı	\supset	30	30	30	30	30	31	31	31	31	31	32	32	32	32	32	32	32	33	33	33	33	33
	Final Time Time Time Time	nal dy igh	Final 1 Body Brain Pituitary Thyroid Lung Heart Liver Kidneys Weight r (g)	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys Weight r (g) 329.4 0.60 0.0045 0.0068 0.279 0.257 2.91 0.63 74	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys Weight (Da 329.4 0.60 0.0045 0.0068 0.276 0.274 2.88 0.62 74	Final Body Weight (Da 1	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da Weight (g) 0.00045 0.0068 0.279 0.257 2.91 0.63 74 3.18.8 0.63 0.0067 0.0072 0.272 0.274 3.13 0.65 74 3.13 0.65 74	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da	Final Brain Pituitary Thyroid Lung Heart Liver Kidneys Weight (Day 1	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da Weight (9) 1	Final Body Weight r (g) 1	Final Brain Pituitary Thyroid Lung Heart Liver Kidneys (Day Weight (Gastrian Pituitary Thyroid Lung Heart Liver Kidneys (Day Meight (Gastrian Control Cont	Final Brain Pituitary Thyroid Lung Heart Liver Kidneys (Day Weight (9) (1) (2) (2) (329,4 0.60 0.0045 0.0068 0.279 0.257 2.91 0.62 74 (318,8 0.63 0.0067 0.0079 0.276 0.274 2.88 0.65 74 (318,8 0.63 0.0067 0.0072 0.272 0.274 3.13 0.65 74 (357,9 0.57 0.0066 0.0072 0.272 0.274 3.13 0.65 74 (354,1 0.58 0.0072 0.0149 0.400 0.368 3.70 0.84 74 (319,6 0.60 0.0067 0.0105 0.265 0.271 2.98 0.65 74 (319,6 0.60 0.0067 0.0105 0.490 0.328 4.71 0.86 74 (269,4 0.75 0.0082 0.0092 0.336 0.311 2.97 0.69 74 (285,6 0.69 0.0041 0.0109 0.274 0.247 2.58 0.56 74	Final Body Weight (Da Weight (G) (G) (G) (G) (G) (G) (G) (G	Final Brain Pituitary Thyroid Lung Heart Liver Kidneys (Day Weight (Gay Meight (Final Body Weight (Day Meight (Gainel Body) Figure Brain Pituitary Thyroid Lung Heart Liver Kidneys (Day Meight (Day Meight (Carried Body) (Carried Bo	Final Body Weight (Day Thyroid Lung Heart Liver Kidneys (Day Weight (G)	Final Body Weight Cup Thyroid Lung Heart Liver Kidneys (Da Weight (g)) 1 Body	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da Weight (G)) 1 Body Weight (D) (G) (G) (G) (G) (G) (G) (G) (G) (G) (G	Final Body Weight Cu) Condessor Cond	Final Brain Pituitary Thyroid Lung Heart Liver Kidneys Weight Gall For Marian Brain Pituitary Thyroid Lung Heart Liver Kidneys 129.4 0.60 0.0045 0.0068 0.279 0.257 2.91 0.63 74 329.4 0.60 0.0045 0.0079 0.276 0.274 2.88 0.65 74 318.8 0.63 0.0067 0.0072 0.279 0.274 3.13 0.65 74 357.9 0.57 0.0066 0.0072 0.272 0.274 3.13 0.65 74 357.9 0.58 0.0072 0.0079 0.265 0.271 2.98 0.65 74 319.6 0.60 0.0067 0.0079 0.265 0.271 2.98 0.65 74 319.6 0.60 0.0067 0.0105 0.247 0.303 3.10 0.65 74 275.8 0.72 0.0067 0.0105 0.270 0.289 2.89 0.65 74 275.8 0.69 0.0041 0.0109 0.274 0.289 2.89 0.667 74 327.7 0.60 0.0070 0.0066 0.274 0.289 0.667 74 327.7 0.60 0.0071 0.0060 0.297 0.250 3.08 0.66 327.8 0.68 0.0077 0.0060 0.297 0.250 3.08 0.66 328.4 0.65 0.0120 0.0099 0.399 0.320 3.34 0.69 328.1 0.65 0.0024 0.0069 0.299 0.276 3.06 0.69 328.1 0.65 0.0024 0.0069 0.299 0.276 3.06 0.69 328.1 0.65 0.0024 0.0069 0.299 0.276 3.08 328.3 0.65 0.0024 0.0070 0.0069 0.299 0.276 3.06 328.3 0.69 0.0074 0.0076 0.299 0.276 3.06 328.3 0.69 0.0074 0.0077 0.289 0.276 3.06 338.3 0.69 0.0074 0.0077 0.289 0.276 3.08 338.3 0.69 0.0074 0.0077 0.289 0.276 3.08 338.3 0.69 0.0074 0.0077 0.289 0.276 3.08 338.3 0.69 0.0074 0.0077 0.289 0.289 0.699 0.599	Final Body Brain Pituitary Thyroid Lung Heart Liver Kidneys (Da Weight G)	Pinal Brain Pituitary Thyroid Lung Heart Liver Kidneys

CONTINUED
9-1-F4-1
APPENDIX

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Female

Animals Killed on Schedule (104 Week)

.353 0.2	1000000	081 082 072 073 081 096	081 082 072 073 081 081 086 096	0.0062 0.0091 0.0057 0.0072 0.0063 0.0073 0.0052 0.0081 0.0052 0.0089
53 0.2		081 089 072 073 073 081 081 096	.0062 0.0081 0. .0091 0.0089 0. .0057 0.0072 0. .0233 0.0081 0. .0052 0.0081 0.	.65 0.0062 0.0081 0.085 0.0081 0.057 0.0089 0.053 0.0072 0.0073 0.062 0.0073 0.062 0.0074 0.0089 0.065 0.0074 0.0089 0.0089
53 0.2	m 22 2 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	081 089 072 073 081 096	.0062 0.0081 .0091 0.0089 .0057 0.0072 .0053 0.0073 .0052 0.0076 .0044 0.0089	.65 0.0062 0.0081 .58 0.0091 0.0089 .62 0.0057 0.0072 .62 0.0233 0.0073 .62 0.0052 0.0081 .67 0.0044 0.0089
	222600	089 072 073 081 081 076 089	.0091 0.0089 0. .0057 0.0072 0. .0233 0.0081 0. .0052 0.0076 0. .0044 0.0089 0.	.62 0.0091 0.0089 062 0.0057 0.0072 062 0.0233 0.0081 062 0.0052 0.0076 067 0.0044 0.0089 0.
67 0.2	228201	072 073 081 076 089	.0057 0.0072 .0063 0.0073 .0233 0.0081 .0052 0.0076 .0044 0.0089	. 62 0.0057 0.0072 .53 0.0063 0.0073 . 62 0.0233 0.0081 . 62 0.0052 0.0076 . 67 0.0044 0.0089
81 0.2	28200	073 081 076 089	.0063 0.0073 .0233 0.0081 .0052 0.0076 .0044 0.0089	.53 0.0063 0.0073 .62 0.0233 0.0081 .62 0.0052 0.0076 .67 0.0044 0.0089
63 0.2	m 2 m	081 076 089 096	.0233 0.0081 .0052 0.0076 .0044 0.0089 .0043 0.0096	.62 0.0233 0.0081 .62 0.0052 0.0076 .67 0.0044 0.0089
19 0.2	330	076 089 096	.0052 0.0076 .0044 0.0089 .0043 0.0096	.62 0.0052 0.0076 .67 0.0044 0.0089 .56 0.0043 0.0086
91 0.3	3	9 6 0 0 9 6	.0044 0.0089 .0043 0.0096	.67 0.0044 0.0089
338 0.28	ŧ	960	.0043 0.0096	2000 0 8700 0 25
02 0.3	7			0600.0
17 0.3	ω.	188	.0078 0.0188	.68 0.0078 0.0188
28 0.3	ε.	84	.0086 0.0084	.63 0.0086 0.0084
82 0.2	2	62	.0048 0.0062	.60 0.0048 0.0062
65 0.2	.2	70	.0046 0.0070	.53 0.0046 0.0070
36 0.3	ω,	76	.0047 0.0076	.64 0.0047 0.0076
3052 0		00857 0	0857 0	618 0.00738 0.00857 0
3			5 3	35 3
0.04993 0.0	•	002407 0	2 407	.004578 0.002407

APPENDIX 9-1-F4-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Female

Animals Killed on Schedule (104 Week)

	(Day)	7.40	7 40	7 40	07.7	047	740	7.40	740	740	740	7.41	741	7.41	747	767	7 4 T	777	7.41	/ 4T	7.42	742	/ 42	742
																								,
Ovaries		0.023	.03	.02	.02	.02	.02	.02	.03	02	0.1	0.2	0.2	0.1	0.1	01	0.1	0.2	0.7		0.2	0.0	2 0	0 1
Spleen		0.193	. 23	.17	. L	.65	.14	. 25	.73	1.9	. 27	18	1.6	.46	19	34	89	. 22	49	19	13	20	α	1 1
Adrenals		0.0193	.018	.021	.018	.029	.016	.022	.026	.021	.021	.019	.016	.018	.019	.019	.020	.016	.015	.018	013	020	0.20)
Animal	Number		7 ($\frac{3}{2}$	30	30	3	37	3]	31	3.1	32	32	32	32	32	32	32	33	33	33	33	33	1

APPENDIX 9-1-F4-2 CONTINUED

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Female

82014	 											7.43			743		
Experimental No.																	; ; ; ; ; ; ;
Exp	 													-		# F F F F F F F F F F F F F F F F F F F	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
																	1
	1 1 1 1 1 1 1 1																1 1 1 1 1 1 1 1
	Ovaries		.02	.01	.01	.02	.02	.02	.02	.02	.03	0.028	.02	.02	.03	0.0235	
	Spleen	; ; ; ; ;		.17	.17	.35	.14	.21	. 22	. 42	.20	0.167	.16	~	.21	0.3361	
; ; ;	Adrenals		0	.037	.078	.015	.018	.018	.020	.021	.020	0.0202	.019	.016	.021	0.02176	
; ; ; ; ; ;	Animal	Number	1338	33	34	34	34	34	34	34	34	Ą	35	35	35	Mean	S.D.

APPENDIX 9-2-M1-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 0 ppm Male

82014	(Day)	10	$_{1}$ \propto	\circ	_	~	$^{\circ}$	J [~	. [\cdot	J IC	· α) <u> </u>	` ~	1 ~	347	
No.	Kidneys.	1 6	0.77		L.		. 6	. ~		. 73	9		٧	50.C7	•	0.62	
Experimental	Liver	10		ω.	r.	0	. 73	. ~			-	7	, ~	ות	•	1.98	
	Heart	34	.27	.32	.23	.30	. 23	. 29	. 27	.21	.26	. 29	.33		25	0.286	
	Lung	.35	57	.36	. 23	.64	.27	.34	31	.23	.27	45	35	.32	37	ω.	
	, Thyroid	.008	0.0093	.008	.005	.004	.004	.008	.007	.005	.005	900.	.007	.043	.008)4	
	Pituitar	.080	0.0063	.004	.003	.003	.019	.097	.050	.004	.002	.004	.003	.020	.004	.002	
 	Brain	.5	0.69	.3	.3	9.	4.	5	J.	. 4	9.	5	.5	09.0	9.	5	
! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !	Final Body Weight (9)	43.	349.1	89	54.	51.	80.	61.	89.	80.	44.	94.	35.	54.	38.	65.	
	Animal Number	7	ω ,					22									

APPENDIX 9-2-M1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 0 ppm

Male

Animals Killed in Extremis

Experimental No. 82014		(Day)		17/	/op	000	ħT/	435	97/	0/0	6/3	0.20 0.30	077	703	TO/	67/	347	- FO
	Testes		1 10		ω,			. 6	ι.	-		9	_	2	9		7	
	Spleen		187	88.	. 28	.32	.37	. 24	. 26	1.9	0.137	17	.67	. 40	. 24	.26	.13	
	Adrenals		.017	.019	.019	.012	.017	.013	.020	.029	0.0103	.012	.046	.013	.027	.015	.013	
	Anima1	Number	7	8	10	13	16	21	22	24	27	29	34	43	49	20	52	

APPENDIX 9-2-M2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 10 ppm Male

mental No. 82014	Kidneys	(Day)	46	99 08.	.60 72	0.44	. 86 71	.51	.10	70 71	79 20			.00	17.	. 70	.80 69
Experimental	Liver		1 &	, L	-	2.91	വ	2	9	- α	, α		•	۲ c	• ·	7	Η.
	Heart		.20	3	. 23	0.208	.30	.28	.32	.26	.32	3.0	, ,			, ,	.38
	Lung		. 25	. 45	.30	0.226	. 83	. 52	.51	30	31	. 44	64	, α		7 /	, 62
	Thyroid		.005	.008	.008	0.0039	.008	.003	.009	.009	.007	.009	.006	007	. C C		.008
	Pituitary		ന	.065	.004	0.0023	.005	.002	.007	.039	.009	.005	.003	.003	200		014
	Brain	 	(°)	Ψ.	4	0.38	u)			υ.	υ.		υ.	0.58	٧	•	75.0
; ; ; ; ;	Final Body Weight	(g)		02.	04.	578.0	83	07.	76.	38.	38.	19.	78.	78.	14	•	3.4 1 •
 	Animal	Number	101	\circ	┥,	┥,	┥,	ч,	(\sim	\sim	\sim	\sim	\sim	~		n 1

APPENDIX 9-2-M2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 10 ppm Male Animals Killed in Extremis

1 1 1 1 1 1 1 1 1 1 1	(Day)	71	665	721	537	71.1	9 1 5	697	715	644	636	613	999	900	069
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
**	! ! ! ! ! !														
1 1 1 1 1 1 1 1 1 1															
Testes		.5	ω.	. 7	.3	٣.	2	9.	0.54	5	ω.	. 7	.5	7.	. 4
Spleen	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.16	.28	.41	.09	.53	. 59	.40	0.136	.26	.27	.73	.22	.26	. 59
Adrenals	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!	.009	.021	.014	.010	.017	.010	.019	0.0152	.025	.019	.022	.026	.020	.014
Animal	Number	0	0	Η,		\vdash	Н	\vdash	123	\sim	\sim	3	\sim	$^{\circ}$	Ω

APPENDIX 9-2-M3-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Male

Animals Killed in Extremis

1 1 1 1 1 1 1 1	(Day)	631	463	694	6 / I	540
Kidneys		0.39	0.38	0.63	0.97	0.44
Liver		2.89	3.66	3.46	4.20	2.32
Heart		0.159	0.313	0.314	0.330	0.199
Lung		0.174	0.370	0.438	0.466	0.202
Thyroid		0.0040	0.0078	0.0054	0.0072	0.0097
Pituitary		0.0021	0.0036	0.0033	0.0594	0.0024
Brain		0.30	0.55	0.54	0.58	0.37
Final Body	Weight (g)	730 8	404.3	399.5	352.3	586.5
Animal	Number	204	223	244	245	247

APPENDIX 9-2-M3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 100 ppm Male

Animals Killed in Extremis

	(Day		,0			540
Testes		! !	0.51	1.16	0.30	0.51
Spleen		0.151	0.953	3.268	0.229	0.162
Adrenals		0.0085	0.0320	0.0139	0.0215	0.0039
Animal	Number	† !	223	244	245	247

APPENDIX 9-2-M4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex ; 1000 ppm Male

Animals Killed in Extremis

(Day)	10	7	2	S	$\overline{}$	-1	8	$^{\infty}$	694	-	S	-	729
Kidneys		•	•						0.77				
Liver	.2	0.	. 2	.2	. 7	.2	9.	4.	3.68	.2	0.	.2	ω.
Heart	.30	. 26	.26	.30	.27	.27	.27	.24	0.351	.27	.31	.29	.33
Lung	.68	. 29	.40	.37	.23	.33	. 49	.34	0.714	96.	.53	.36	. 64
Thyroid	.005	.006	.008	.008	900.	900.	.005	900.	0.0085	.007	.006	.008	.010
Pituitary	0.0027	.002	.004	.004	.003	.068	.004	900.	900.	.005	.003	.005	.007
Brain	0.59	9.	.5	.5	4	.5		.5	.5	5	.5	٠.	0.62
Final Body Weight (9)	8	70.	02.	82.	79.	55.	08.	91.	∞	06.	06.	77.	57.
Animal	307	0	Н	-	\vdash	2	\sim	2	2	2	\sim	\sim	サー

The state of the s

APPENDIX 9-2-M4-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Male

Animals Killed in Extremis

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Day)	10	۱ I	\cdot	ır) -		4 C	າຕ	\circ	١	J 16	0.00 0.17	729
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
1 1 1 1 1 1 1 1														
tes		63	64	42	73	81	50	51	67	81	47	59	18	35
Hes	! ! ! !			•						0				
Spleen	1 1 1 1 1 1 1 1 1	13	.16	.16	.19	.27	. 25	.38	.36	.39	. 92	.37	0.245	.46
Adrenals		.020	.012	.022	.016	.062	.016	.015	.013	19	.023	.012	0.0165	.028
Animal	Number 	307	0				2	\sim	\sim	\sim	2	\sim	\sim	₹ 1

APPENDIX 9-2-F1-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 0 ppm Female

14	! 	(Day)	616	9		φ	5	4	4	ω		6	2	0	/	ω	9	733
tal No. 8201	Kidneys		9	0.	0.87	∞.	. 7	.5	9	9.	. 7	9.	. 7	ω.	5	0.	7.	8.
Experimental	Liver		۲.	.2	3.01	9.	. 7	2.	ω.	.2	ω.	5	4.	ω.	5	. 4	9	. 7
	Heart		.34	.39	0.336	.41	.33	.30	.29	.28	.33	.31	.34	.29	.22	.46	.36	.39
	Lung		.41	.46	0.351	. 43	.40	.27	.41	.64	.56	.33	.61	.50	.27	. 74	.63	. 74
	Thyroid	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.008	.010	0.0070	.009	.006	.007	.011	.007	.015	.012	.008	.008	.005	.008	.008	900.
	Pituitary		.151	.154	0	.005	.007	.049	.006	.009	.007	.008	.006	.003	.004	.015	.004	.008
* * * * * * * * * * * * * * * * * * *	Brain		0.87	6.	0.85	0.	ο.	9.	. 7	9.	. 7	. 7	. 7	۲.	9	6.	0.68	.7
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Final Body Weight	(b)	21.	20.	234.1	94.	22.	91.	04.	99.	93.	75.	70.	89	17.	9 8	96.	58.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Animal	Number	1004	00	00	00	70	T 0	02	02	03	03	03	04	04	04	0.5	05

APPENDIX 9-2-F1-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex: 0 ppm Female Animals Killed in Extremis

bxperimental No. 82014		(Day)		٦ (י עכ	-	9	S	4	4	ω	\vdash	9	\sim	0	572	α	9	\sim
	Ovaries		0.	03	0.0	0		•	•	, 0	, c		, ,	, 0	, ,	0.00 7.00 7.00	70	2 -	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spleen		.32	.35	. 23	25	21	1				· C		2 4	rα	0.201	2 -	2	
	Adrenals	! ! ! ! ! ! !	.029	.035	.026	.035	025	010	024	021	018	028	020	030	0.28	0.0563	022	030)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Animal	Number	0	00	00	00	01	01	0.2	02	03	03	03	0.4	20	1049	5	5	1

APPENDIX 9-2-F2-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex: 10 ppm Female Animals Killed in Extremis

14		(Day)	2	S	9	\mathcal{C}	∞	7	3	\sim	5	ω	\vdash	680	2	9	2	\sim	7
tal No. 8201	Kidneys		8	۲	7.	7.	4.	ω.	9.	. 7	. 7	0.	9.	0.80	6.	. 7	7.	Φ.	. 7
Experimental	Liver			5	0	.5	۲.	ω.	۲.	ε.	ω.	ς.	6.	3.37	۲.	٠,	7.	7.	0.
	Heart		.34	35	.39	.34	.20	.41	.31	.27	. 29	.39	.39	0.454	.34	.33	. 42	.31	.35
	Lung		.34	.36	.67	.79	.21	. 56	.41	.30	.30	.90	.63	0.631	.78	.14	.62	.33	.35
	Thyroid		.007	.007	.006	.006	900.	.008	900.	.012	.007	.011	.009	9600.0	.097	.007	.007	.011	.011
	Pituitary		.086	.121	.007	.022	.007	.007	.005	900.	.054	.025	.004	0.0077	.012	.013	.005	.107	.021
	Brain		•	. 7	9.	۲.	4.		9.	٠.		9	. 7	0.75	. 7	. 7	. 7	ω.	. 7
	Final Body	(g)	62.	52.	82.	64.	98.	67.	28.	82.	56.	25.	80.	273.8	70.	79.	54.	36.	61.
	Animal	Number	\dashv	II	T	12	12	12	12	12	12	13	13	13	14	14	14	15	15

APPENDIX 9-2-F2-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 10 ppm Female

Animals Killed in Extremis

	(Day)		777	000	TOC	D ()	/80	0/0	/35	03 03 03 03		000	C17/	100	T2/	666	679	T59
Ovaries	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	.01	.01	.02	.01	00.	.01	0.	.02	01	0.1	.02	.03	0.4	0.1	0.2	0.2	.033
Spleen Ov		.260	.321	.514	.048	. 309	.680	0 860.	.168 0	99	.372	.797	.125 0	.936	153 0	134 0	205 0	244 0
Adrenals	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	023	.032	.022	.025	.023	.028	.019	.028		.029	.030	.019	.027	.035	034	029	028
Animal	<u></u>	105	_	_	1120	7	12	O	12	12	13	[3	$\frac{1}{2}$	14	۲4		10	5

9-2-F3-1 APPENDIX

CHRONIC AND CARCINGGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Female 100 ppm Level and Sex :

Animals Killed in Extremis

Animal

Number

1202 1203 1209 1212 1212 1221 1221 1225 1225 1225

Experimental No. 82014

Final Body Weight (q)	Brain	Pituitary	Thyroid	Lung	Heart	Liver	Kidneys	(Dav)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1				1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
65.	. 7	.009	∞	. 56	.38	0.	7.	Ω
92.	9.	.011	.007	. 59	.37	ω.	9	9
99	. 7	.008	08	.60	.29	_	φ,	S
24.	φ.	.089	.010	. 42	.41	۲.	9	\vdash
01.	9	.188	.008	.39	.32	7.	. 7	2
56.	٠.	.017	.014	.37	.34	5	ω.	2
47.	۲.	900.	.007	.60	.30	. 7	7.	9
39.	ω.	.007	.017	.85	.45	4	ω.	2
285.6	0.71	0.0078	0.0108	1.060	0.346	4.13	0.79	718
02.	9.	.008	.008	.32	.34	.2	9	ϵ
41.	ω.	.028	.013	.31	.29	5	7.	1
20.	ω.	.004	7	.35	.23	9	9	0
64.	0.73	.007	.005	.50	.51	4.	7.	9
83.	9.	.005	9	.32	.33	4	7.	2
48.	0.79	0.0082	9	.41	α	. 2		609

1235 1236 1244

1230

APPENDIX 9-2-F3-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 100 ppm Female

Animals Killed in Extremis

	(Day)	657	999	658	617	427	728	260	720	718	732	575	209	665	727	609
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1														
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1							•							
											٠	•				
								•								
											÷					
												-				
Ovaries		.01	.01	.03	.02	.01	.03	.06	0.010	.01	.02	.01	M	.01	0.019	-
Spleen		.54	.76	96.	.27	.18	.19	.68	5.412	.46	.17	.18	.12	.58	.09	9
Adrenals		0.0171	.020	.029	.032	.027	.027	.034	0.0243	.025	.035	.027	.029	.026	.028	.032
Animal	Number	1202	20	20	21	21	21	22	1223	22	22	22	23	23	23	24

M : Not measured because of operational mistake

APPENDIX 9-2-F4-1

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Individual Organ Weight/Body Weight Ratio Data---g/100g

Level and Sex : 1000 ppm Female

1.4		(Day)	10	' C	~		· LC	· (~) (*)	∞	~) () C	V C	718	1
tal No. 82014	Kidneys		10	. 10	- ∞	9		. 6		· C	, α	9	, α	•	0.69	,
Experimental No	Liver		16	5	0	.5	Φ.	_∞	ω.	4.	ω,	` '	. 7	٠ رد	2.67	
	Heart		1 4	.2	٣.	2	4	2	4.	ς,	ς,	۲,	. ~		0.301	
	Lung		.63	. 29	.64	.28	.38	.27	0.544	.49	.31	.34	36	. 23		
	Thyroid		.010	.006	.009	.008	.011	.011	0.0130	.012	.006	.009	900.	.007	•	
	Pituitary		.01	00.	00.	00.	00.	00.	0.0164	00.	.09	00.	.08	.01	.01	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Brain		6.	. 4	9.	9.	۲.	9.	0.79	φ	9.	7.	. 7	5	0.73	
	Final Body Weight	(g)	11.	. 60	04.	05.	83.	45.	256.8	43.	89.	83.	51.	27.	73.	
 1 1 1 1 1	Animal	Number	30	30	30	31	37	31	1319	32	32	33	33	33	34	

APPENDIX 9-2-F4-2

CHRONIC AND CARCINOGENIC INHALATION TOXICOLOGICAL STUDY OF METHANOL IN F344 RATS

Level and Sex : 1000 ppm Female

Animals Killed in Extremis

82014	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	(Day)	10	1	1 (7	. ഗ	$^{\circ}$) (r	∞	\sim	~		10	718
Experimental No.									•						
				26.											
	Ovaries		.02	.01	.04	.02	.02	.03	0.018	.02	.00	.01	.01	.01	.09
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Spleen		.42	.78	.49	.19	.85	.34	0.042	.13	.20	.23	.23	15	.02
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Adrenals		.036	.019	.035	.022	.048	.030	0.0225	.049	.025	.483	.022	.024	.016
	Animal	Number	30	30	30	31	31	31	1319	32	32	33	33	33	34